

# Context (CSRD), methodology and strategic value of a climate risk assessment with practical insights from Syensqo





**Marc Daelman**  
Partner, PwC  
Vice-President ESG  
Commission IBR



**Stephanie Hold**  
Manager, PwC



**Philippe Chauveau**  
Head of Climate, Syensqo



# Agenda

- 1) Setting the scene: the importance of climate change
- 2) Transition and physical risks and opportunities
- 3) Syensqo - Climate risk assessment
- 4) Q&A



# Climate change in today's regulatory landscape



# Global risk forecast

“Climate action failure”,  
“extreme weather” and  
“biodiversity loss” rank as  
the three most potentially  
severe risks for the next  
decade.



[WEF The Global Risk Report 2023 \(Page 6\)](#)

# Will you be in business in the next 30 to 50 years?

Nearly 40% of CEOs don't think their companies will be economically viable a decade from now if they continue on their current path

**Question:** If your company continues running on its current path, for how long do you think your business will be economically viable?

10 years or less

39%

More than 10 years

59%

PwC Global [26th Annual Global CEO Survey results](#)



# Belgium and Climate Change today

## Belgium's climate failures violate human rights, court rules

Judges say state's failure to meet climate targets breaches civil law  
and human rights convention

## Belgian state sued over climate policy shortcomings

26 september 2023

Belgian lawyer takes climate change battle to  
court

**France, Italy, Belgium: The European regions  
most at risk from floods and sea level rise**

**Oatly, Shell and Coca-Cola: Why are climate  
activists taking companies to court?**

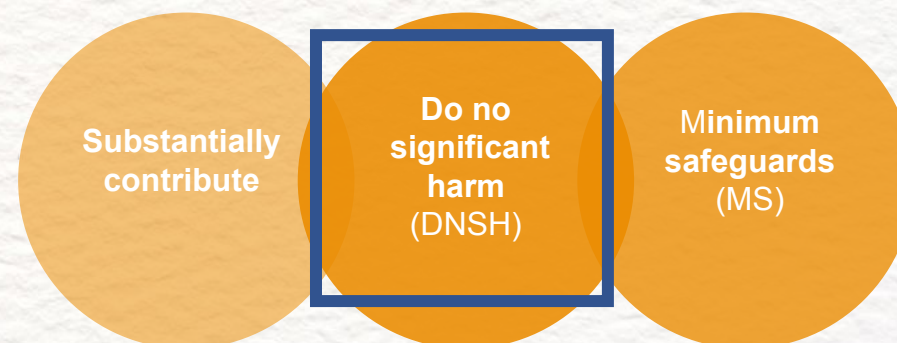
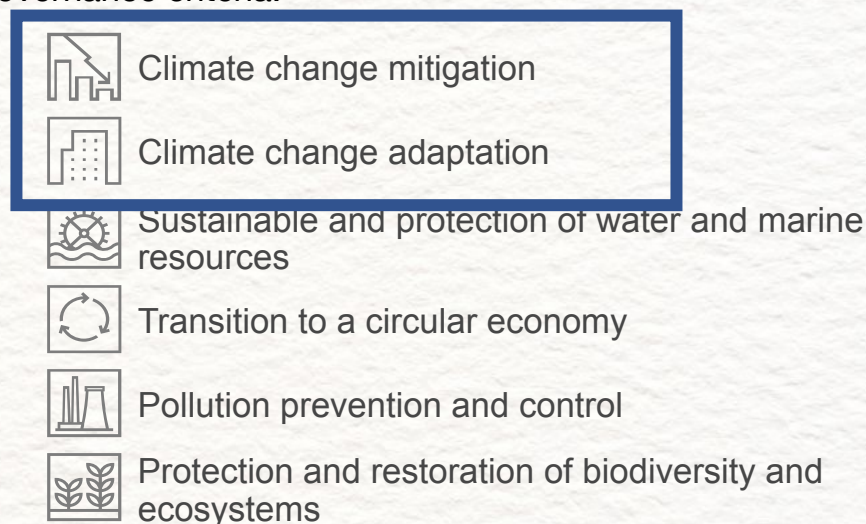


# Part of EU Green Deal regulations

**The CSRD sets out specific non-financial reporting requirements.** The EU has mandated the European Financial Reporting Advisory Group (EFRAG) to develop sustainability reporting standards, the so called ESRS.

CROSS-CUTTING STANDARDS		
ESRS 1 General requirements		ESRS 2 General disclosures
TOPICAL STANDARD		
Environment	Social	Governance
<b>ESRS E1</b> Climate change	<b>ESRS S1</b> Own workforce	<b>ESRS G1</b> Business conduct
<b>ESRS E2</b> Pollution	<b>ESRS S2</b> Workers in the value chain	
<b>ESRS E3</b> Water & marine resources	<b>ESRS S3</b> Affected communities	
<b>ESRS E4</b> Biodiversity & ecosystems	<b>ESRS S4</b> Consumers and end users	
<b>ESRS E5</b> Resource use & circular economy		

**The EU Taxonomy is a classification systems** which establishes a list of sustainable economic activities based on a set of environmental, social and governance criteria.





# Physical and transition risks and opportunities



# ESRS E1-9



Brussels, 31.7.2023  
C(2023) 5303 final  
ANNEX 1

ANNEX  
to the

Commission Delegated Regulation (EU) ...  
supplementing Directive 2013/34/EU of the European Parliament and of the Council as  
regards sustainability reporting standards

EN

EN

## ***Disclosure Requirement E1-9 – Anticipated financial effects from material physical and transition risks and potential climate-related opportunities***

64. The undertaking shall disclose its:

- (a) anticipated financial effects from material *physical risks*;
- (b) anticipated financial effects from material *transition risks*; and
- (c) potential to benefit from material climate-related *opportunities*.

**-> Resilience**



# Why conduct scenario analysis?

## Investment



Where do I need to invest in the future, where do I need to develop new skills and built up know-how to be resilient against future changes?

## Risk management



Does climate change increase the materiality of existing risk factors and how do I integrate climate risk into risk management?

## Portfolio management



How do climate-related risks and opportunities affect the return and profitability position of my assets and/or loans?

## Sustainability

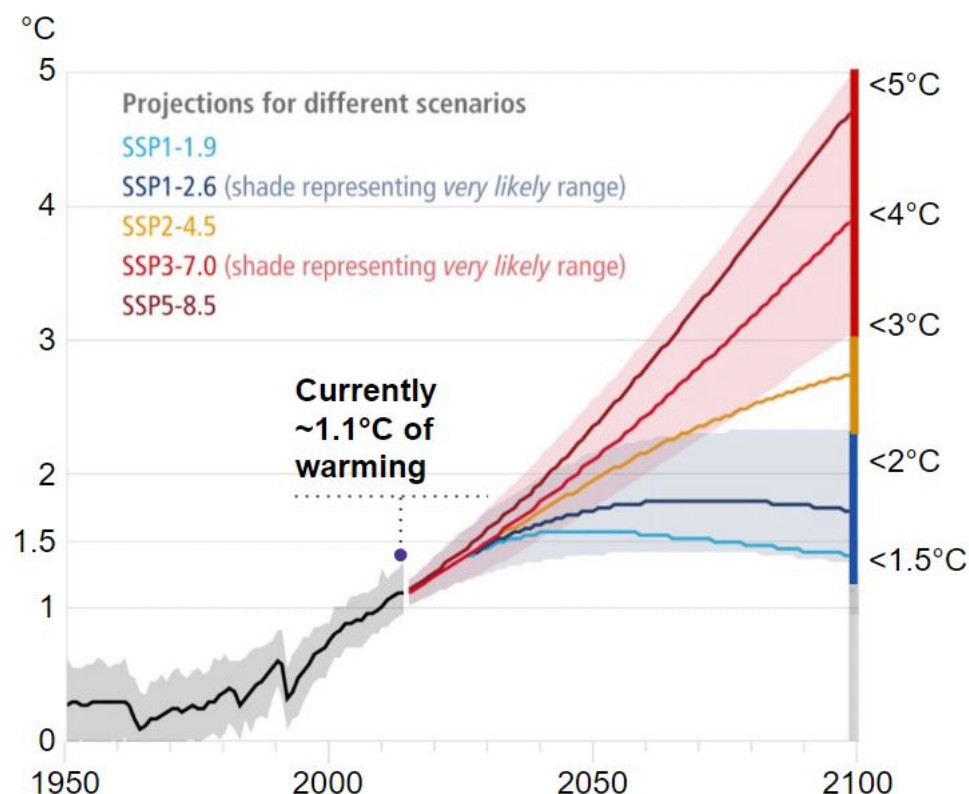


How and what should I reflect in my (PRI, GRI or TCFD-) reporting and be compliant with the CSRD ESRS E1?



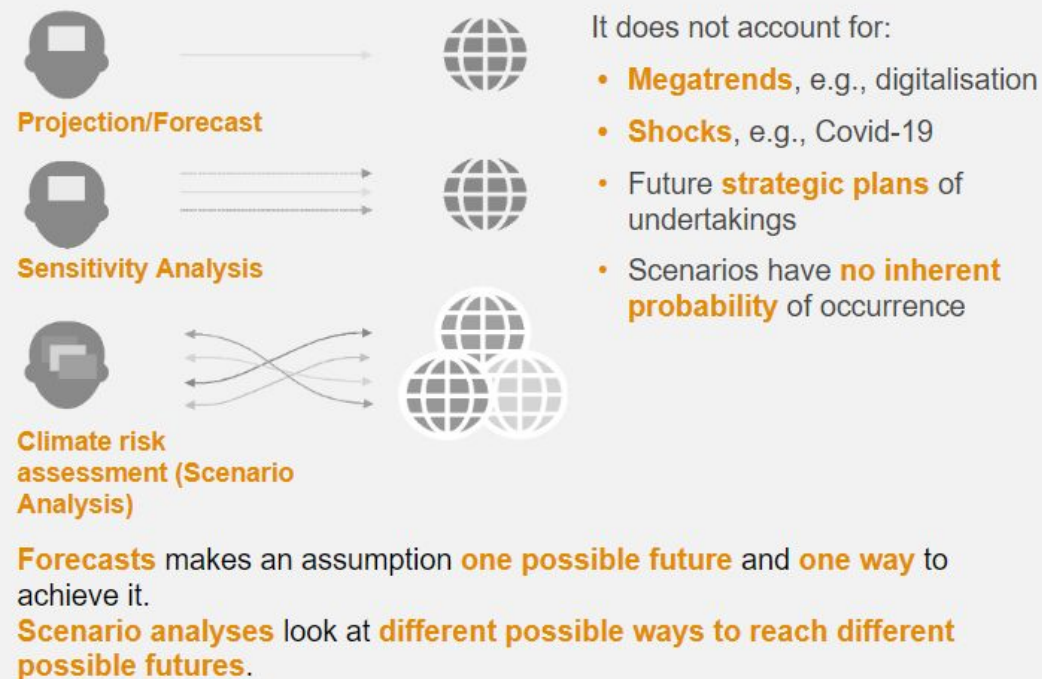
# Climate risk assessment

## Global warming pathways resulting from different IPCC climate scenarios



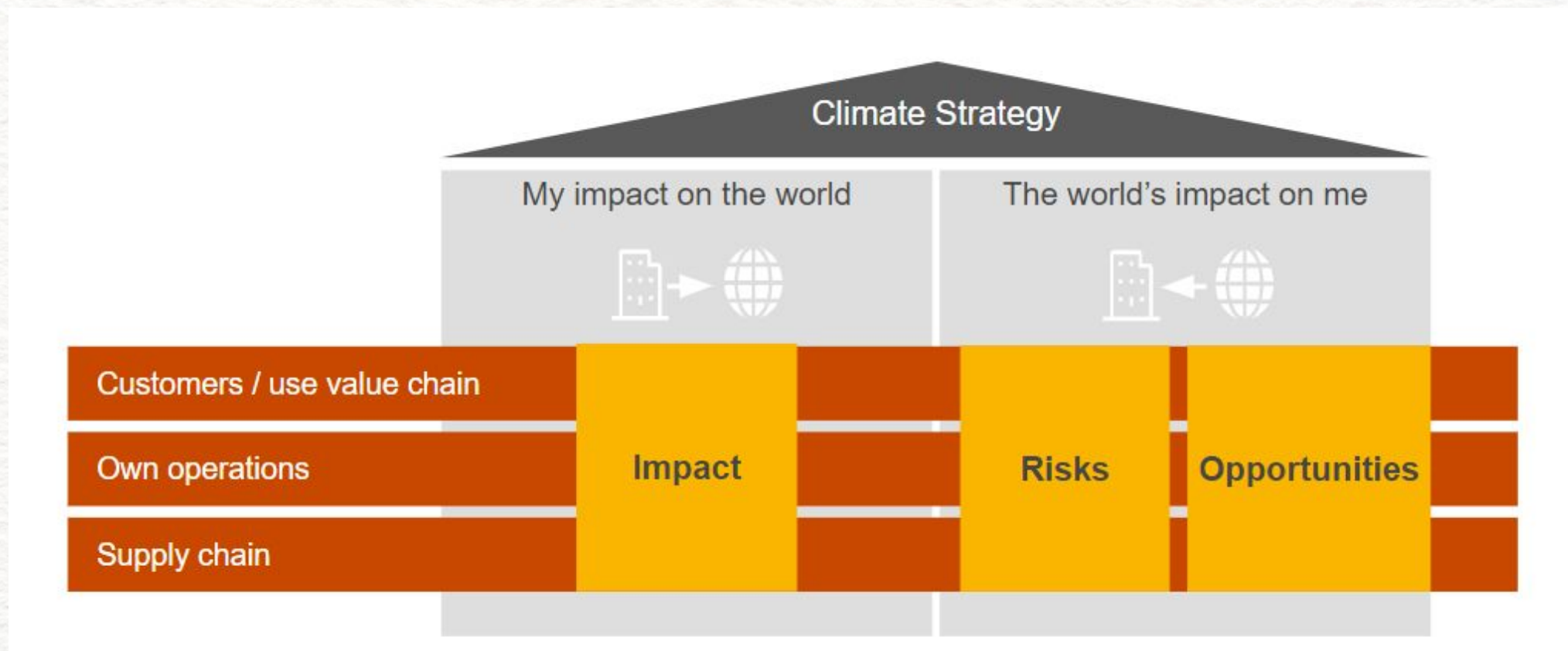
Source: IPCC WGII Sixth Assessment Report, SPM-16, Figure SPM.3, 2022  
IPCC: Intergovernmental Panel on Climate Change  
SSP: Shared Socioeconomic Pathways

## Climate risk assessment helps companies test the resilience of their business and portfolio strategies





## View on entire supply chain





# Physical risks

Classification of climate-related hazards (Source: Commission delegated regulation (EU) 2021/2139)				
	Temperature-related	Wind-related	Water-related	Solid mass-related
Chronic	Changing temperature (air, freshwater, marine water)	Changing wind patterns	Changing precipitation patterns and types (rain, hail, snow/ice)	Coastal erosion
	Heat stress		Precipitation or hydrological variability	Soil degradation
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
Acute			Water stress	
	Heat wave	Cyclones, hurricanes, typhoons	Drought	Avalanche
	Cold wave/frost	Storms (including blizzards, dust, and sandstorms)	Heavy precipitation (rain, hail, snow/ice)	Landslide
	Wildfire	Tornado	Flood (coastal, fluvial, pluvial, ground water)	Subsidence
			Glacial lake outburst	



# Physical risks

Steps to be considered:

- 1) Analyse key sites for own operations, customers and supply chain
- 2) Consider various physical hazards and identify likelihood of events
- 3) Identify where physical hazards become business risks through the destruction of goods, and/or operational downtime within the business value chain



# Transition risks

Examples of climate-related transition events (examples based on TCFD classification)			
Policy and legal	Technology	Market	Reputation
Increased pricing of GHG emissions	Substitution of existing products and services with lower emissions options	Changing customer behaviour	Shifts in consumer preferences
Enhanced emissions-reporting obligations	Unsuccessful investment in new technologies	Uncertainty in market signals	Stigmatization of sector
Mandates on and regulation of existing products and services	Costs of transition to lower emissions technology	Increased cost of raw materials	Increased stakeholder concern
Mandates on and regulation of existing production processes			Negative stakeholder feedback
Exposure to litigation			



# Transition risks

## Steps to be considered:

### 1) Net production cost breakdown (status quo)

Analysis of the production cost breakdown to identify key input materials

### 2) Price/cost changes

If the price of specific products increases due to climate-related transitions, can this lead to significant price changes

### 3) Volume changes

Transition to lower temperature scenarios can lead to climate-related transitions which changes the demand of specific products

### 4) Adaptation potential

e.g. cost pass through to customers, backup for supply chain interruptions, alternative suppliers, which are not as much affected by regulation



# From climate materiality to financial materiality

## Physical risks

- Valuation of property including contents and stock
- Estimation of loss of revenue due to downtime
- Likelihood and impact of events (destruction or downtime)

## Transition risks

- Raw material scenario impact with price increase
- Cost passthrough rate
- Demand changes
- New contribution margins

☐ Integrate amount into risk strategy, financial planning and budgeting for future years

# From reporting to steering







# Climate risk assessment

16 January 2024



1 A strong industry leader

2 Transition risks & opportunities

3 Physical risks



# YEARS



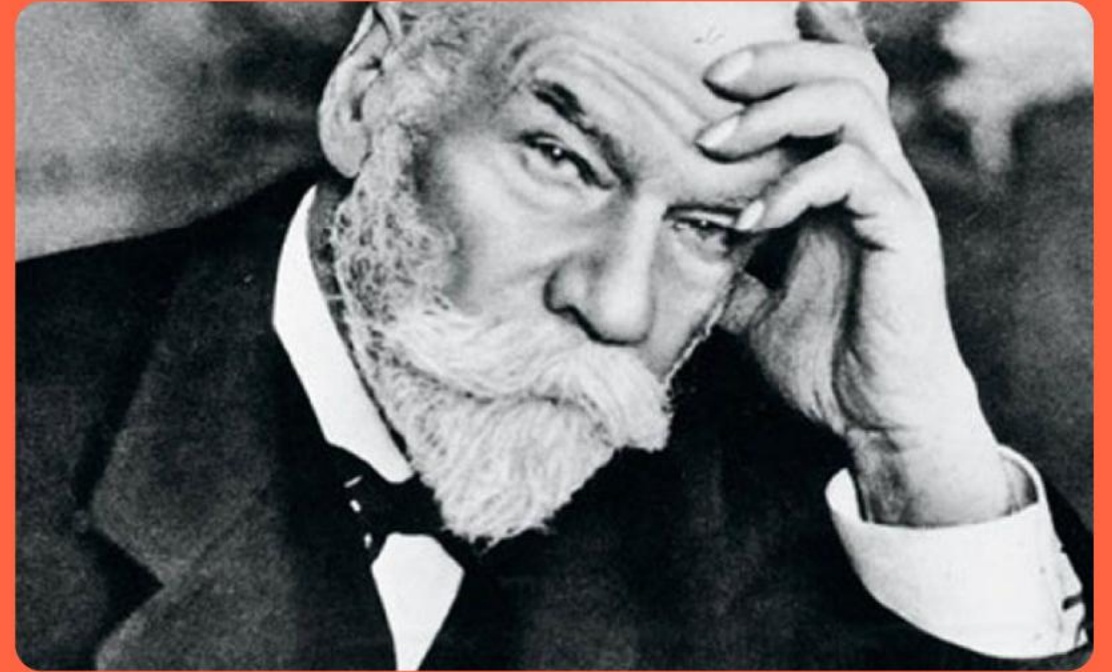
For 160 years, we have nurtured a culture of innovation, a pioneering spirit.

For 160 years, our passion for science has been passed down from generation to generation, so that each of our innovations is the starting point for tomorrow's great discoveries.

For 160 years, we've been reinventing ourselves. Because immobility is science's worst enemy, we are constantly challenging our certainties to advance science, our society and humanity as a whole.



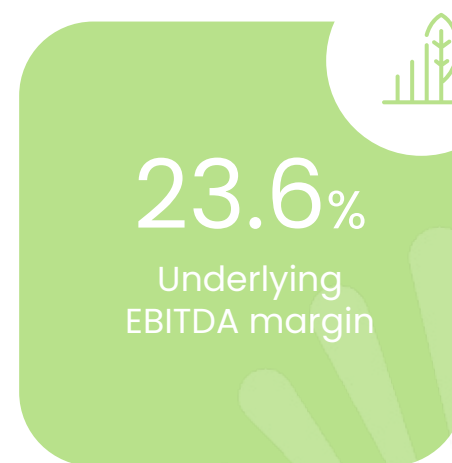
Starting today, a new page  
in our history is being turned.  
Inspired by the vision and  
dedication of Ernest Solvay  
We are looking at the next  
160 years with excitement  
and serenity.



Ready to unlock the power  
of two champions.



# Top-tier specialty player



# Leadership in growth markets



Materials



Consumers & Resources

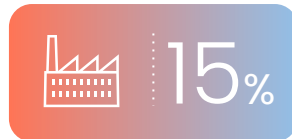
Automotive



Aerospace



Industrial Applications <sup>1</sup>



Resources & Environment



Consumer Goods <sup>2</sup>



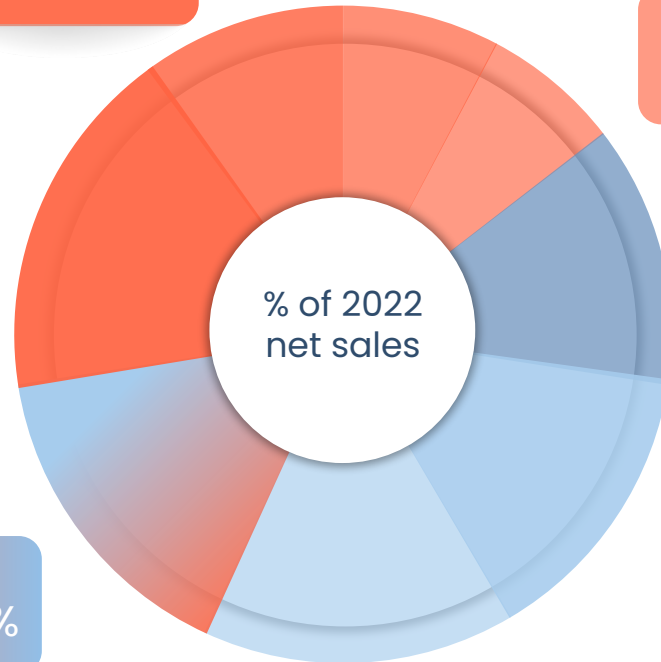
Agro, Feed & Food



Building & others



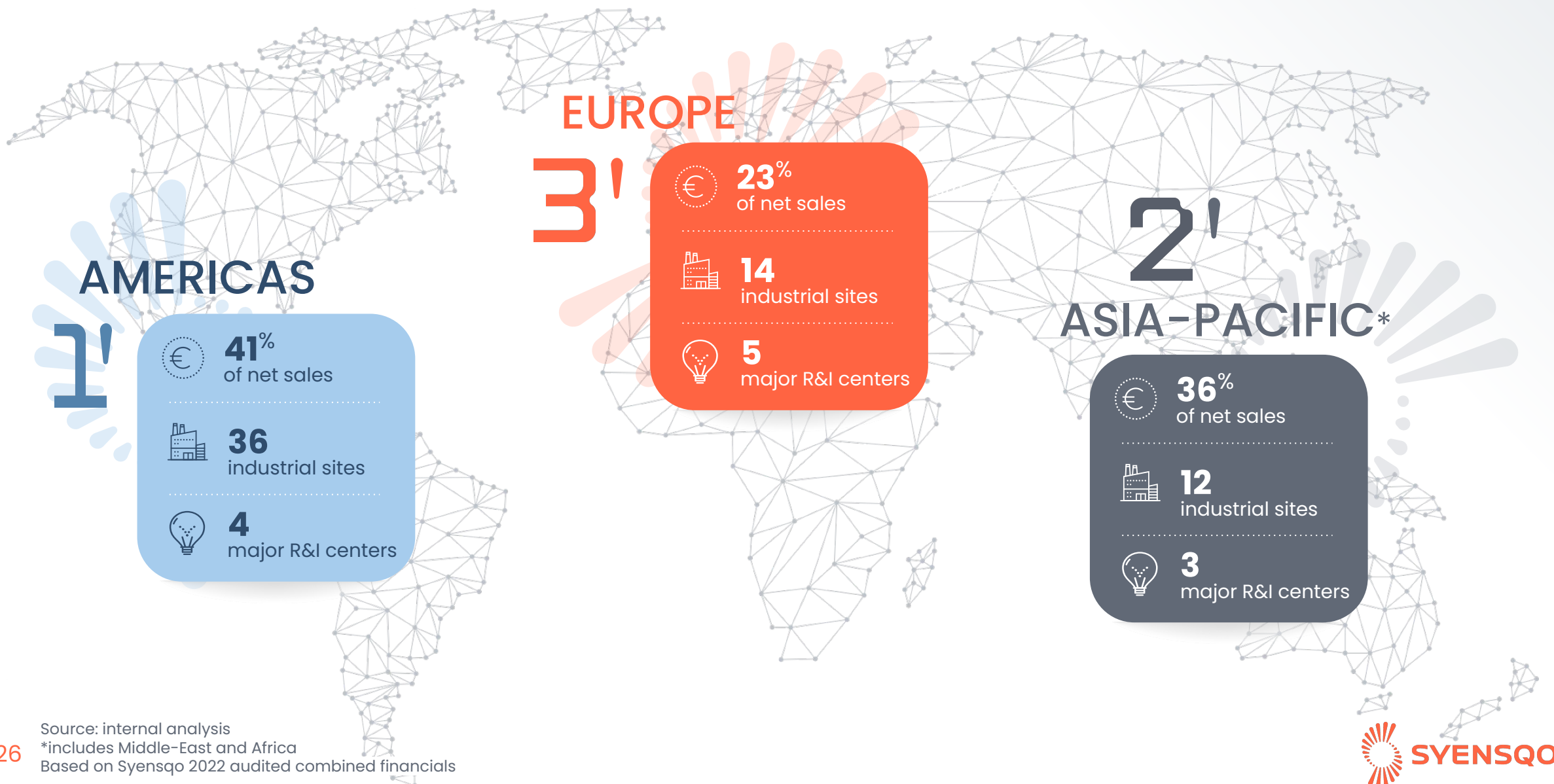
Electronics



**TOP 3**  
Market position\*



# Global and close to our customers



# One Planet fortifies GROWTH



CLIMATE

📌 **Carbon Neutral**  
Syensqo scope 1&2 by  
**2040**

📌 **-40%** Syensqo scope 1&2<sup>(2)</sup>  
**-23%** Syensqo scope 3 by  
2030<sup>(2)</sup>



GROWTH

📌 Sustainable Solutions driven  
by **Circularity**

📌 **18%** of Circular sales  
by 2030<sup>(2)</sup>



BETTER LIFE

📌 **Safety RIIR<sup>(1)</sup>**  
Aim for zero

📌 **Gender parity<sup>(3)</sup>**  
in 10 years

📌 **Living wage**  
To 100% of workforce by 2026





## Transition risks & opportunities

# Scenario and business expertise for a well-established process

IEA scenario +1.5°C and +3°C by 2030 and 2050

Supply chain

Production

Sales

Contribution margin

Costs = f (energy, CO<sub>2</sub>)

Cost pass through

Volumes = f (markets)

Granularity and Modelling

Procurement, Industrial, Strategy, Sustainability

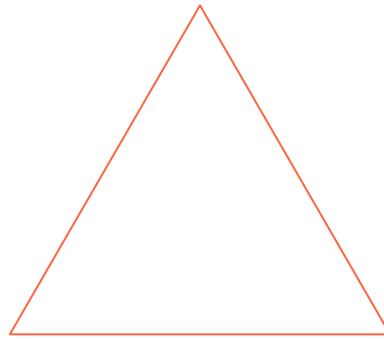
PWC



# Impacting outcomes

## Board and Executive Leadership

- *Annual Report, CDP disclosure*
- *Governance, operational management*



## Strategy and Risk/Opportunity management

- *Investment in PVDF in the US with Orbia*
- *Growth platforms: Battery Materials, Green H2, Renewable Materials and Biotechnology*

## Operational plans

- *Scope 3 program with suppliers*



## Physical risks



# Location-based assessment

IPCC scenario +3°C and +4°C by 2030 and 2050

Hazards: convective storm, flood, heatwave, drought, sea level rise, tropical cyclone, wildfire

## Sites

- assets value
- sales

Asset damage – Business interruption

Financial impact  
in the absence of prevention measures

# Adapting to a changing climate

Climate science is available now: ... 2030 ... 2040 ... 2050 ...

Integrate in risk assessment

- existing production sites
- new investments

Other locations with concentration

- shipments in & out
- clusters in the supply chain and downstream



# Lessons learned

Educate to scenario analysis and its disclosure

Assemble a multi-disciplinary team

Less control outside the walls, not less assessment of risks and opportunities

Look into the future for physical impacts, not the rear-view mirror

Connect the dots with other sustainability topics: biodiversity loss, social ...

# Thank You

# Questions?



## Evaluation form

