MEASURING AND DISCLOSING NATURE-RELATED RISKS & OPPORTUNITIES

NATURE-RELATED REPORTING: REGULATORY, INVESTOR AND CORPORATE PERSPECTIVES

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AGENDA

1. ABOUT HOLCIM & CONTEXT
2. IMPACTS & DEPENDENCIES IN THE CONSTRUCTION MATERIAL SECTOR
3. TNFD HOLCIM GAP ANALYSIS & PROCESS TO CLOSE GAPS
4. PHYSICAL RISKS ASSESSMENT
5. TRANSITION RISKS & OPPORTUNITIES ASSESSMENT
6. OUTPUT EXAMPLES & NEXT STEPS

#1 ABOUT HOLCIM & CONTEXT

FAST FACTS ABOUT HOLCIM
GLOBAL LEADER IN CONSTRUCTION MATERIALS

~65K
Employees

330
Patent families in sustainable construction

2030 & 2050
1.5 degree aligned net-zero targets, validated by SBTi

500+ Start ups
in our open innovation ecosystem

26.4 B CHF
Net Sales

4%
reduction in our CO_2 per net sales

#1
largest R&D organization in our industry

300+
researchers in worldwide R&D hubs

2.5 B

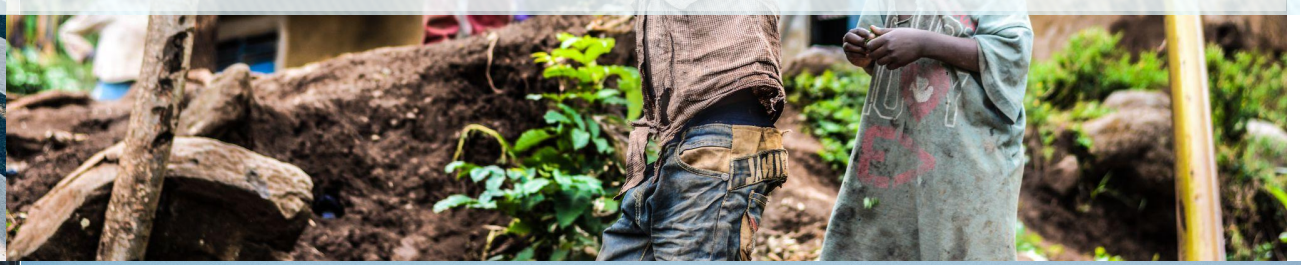
more people will live in cities by 2050

60%

of the infrastructure needed by 2050 is not built yet

1.6B

people lack adequate housing and sanitation



On current trajectory we'll need

2.3 PLANETS BY 2040

NATURE IS CATCHING UP TO CLIMATE RAPIDLY

WE NEED TO BE READY FOR NEW POLICIES AND REPORTING FRAMEWORKS

ALL CLIMATE FRAMEWORKS . . .

. . . ARE BEING REPLICATED FOR NATURE

INTERGOVERNMENTAL PANELS	INTERNATIONAL POLICY GOALS	FINANCIAL DISCLOSURES	TARGET SETTING	ESG RATINGS
ipcc – Intergovernmental Panel on climate change	PARIS2015 UN Climate Change Conference COP21·CMP11	TCFD – Task Force on Climate-Related Financial Disclosures	Science Based Targets	Climate Action 100+
1988	2015	2017	2014	2017
ipbes – Science and Policy for People and Nature	2020 UN Biodiversity Conference COP 15 / CP-MOP 10 / NP-MOP 4 Ecological Civilization-Building a Shared Future for All Life on Earth KUNMING – MONTREAL	TNFD – Taskforce on Nature-related Financial Disclosures	Science Based Targets Network Global Commons Alliance	Nature Action 100
2012	2022	2023	2023	2023

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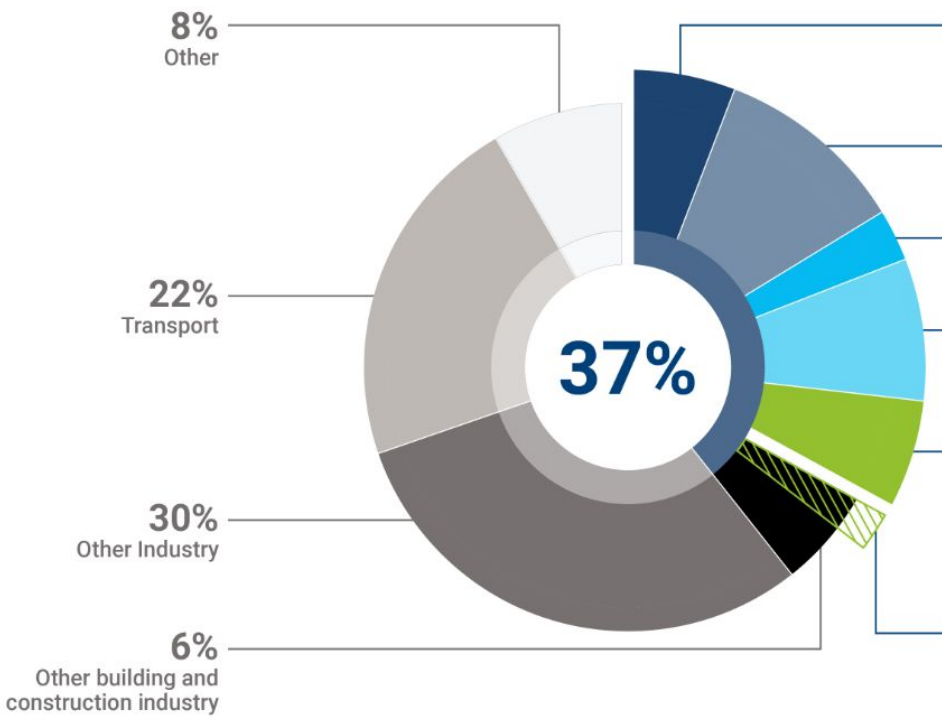
#2 IMPACTS & DEPENDENCIES IN THE CONSTRUCTION MATERIAL SECTOR

BUILT ENVIRONMENT IMPACTS
GLOBAL GREENHOUSE GAS EMISSIONS

THE BUILT ENVIRONMENT ACCOUNT FOR 37% OF GLOBAL GREENHOUSE GAS EMISSIONS



- 6% Residential (direct)
- 11% Residential (indirect)
- 3% Non-residential (direct)
- 8% Non-residential (indirect)

27% OPERATIONAL CARBON
from heating, cooling and powering

- 6% Buildings construction industry–concrete, aluminium and steel
- ~3% Estimated emissions for bricks and glass

10% EMBODIED CARBON
from materials and the construction phase

Source: United Nations Environment Programme, 2022, p42

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BUILT ENVIRONMENT IMPACTS
NATURE AND GLOBAL RESOURCES

THE BUILT ENVIRONMENT HAVE SIGNIFICANT IMPACTS ON NATURE AND GLOBAL RAW RESOURCES

29%
of IUCN's list of threatened and near-threatened species
(World Economic Forum & AlphaBeta, 2020, 9)

15%
of global freshwater consumption worldwide
(G.K.C Ding, 2014)

50%
of global raw materials consumption
(WBCSD, 2024)

- **Habitat loss and fragmentation**
- **Soil erosion and pollution**
- **Water depletion and pollution**
- **Non-GHG Emissions**
- **Noise and light pollution**

and many more…

DEPENDENCIES IN THE CONSTRUCTION MATERIAL SECTOR
ENCORE ANALYSIS

	ECOSYSTEM SERVICES	DEPENDENCIES
FRESHWATER QUANTITY	**Direct physical input** Direct provision of freshwater essential for human well-being and most economic activities	**Very high materiality rating** The production process is extremely vulnerable to disruption. The degree of protection offered by the ecosystem service is critical and irreplaceable for the production process
FRESHWATER QUALITY	**Enables Production Process** Contribution of terrestrial ecosystems in regulating water quality by retaining nitrogen and reducing the level of pollution.	**Low materiality rating** Most of the time the production process can take place even with full disruption of the ecosystem service

Our business depends on the availability of freshwater and 26% of Holcim sites are located in water risk areas!!!

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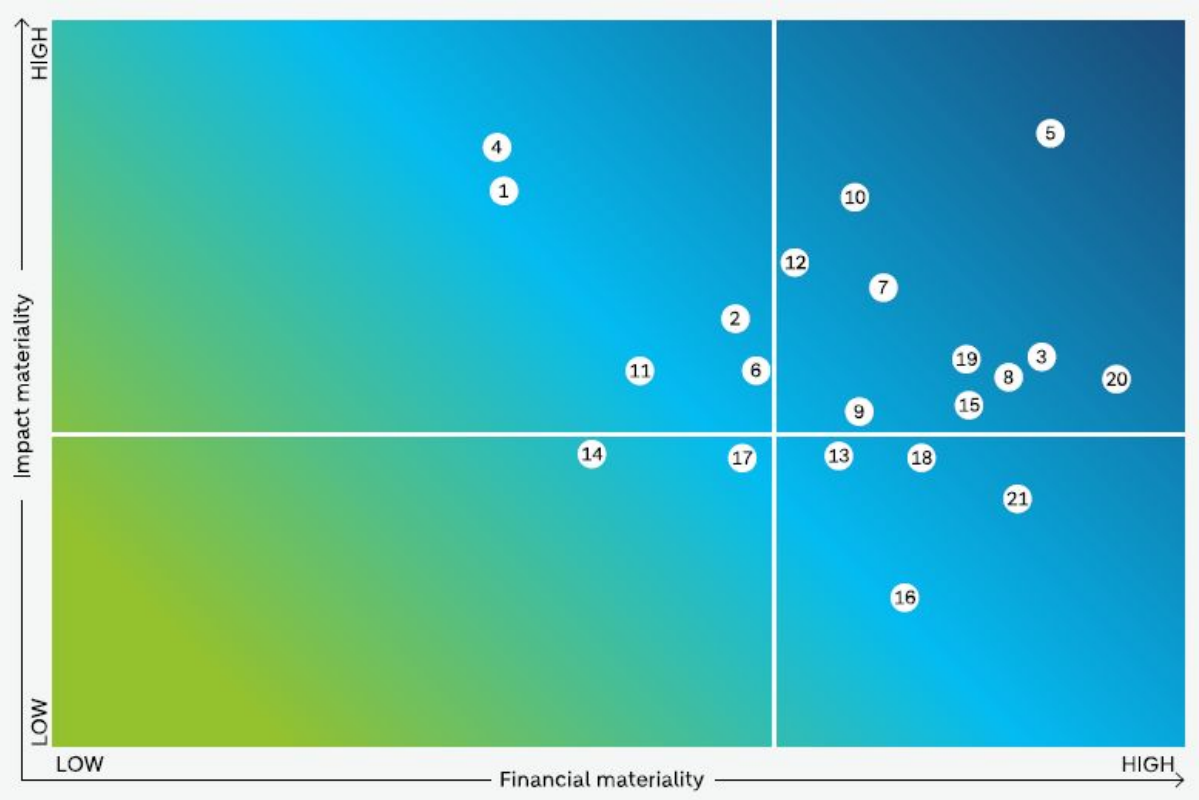
DOUBLE MATERIALITY ASSESSMENT
TOPICS TO BE PRIORITIZED



ENVIRONMENTAL

1. Biodiversity, ecosystems and water management
2. Climate change adaptation and resilient infrastructure
3. Energy and alternative fuels
4. GHG emissions in the value chain (indirect)
5. Operational GHG emissions (direct)
6. Operational waste management
7. Pollution (air)
8. Resource use and circular economy

SOCIAL

9. Human rights and labor practices
10. Occupational health and safety
11. Responsible procurement
12. Social impact and community engagement
13. Talent attraction, diversity and inclusion

GOVERNANCE

14. Corporate communication
15. Corporate governance, ethics and compliance
16. Digitalization, AI and cyber security
17. Responsible advocacy and public policy
18. Responsible pricing

MARKET

19. Green CapEx and innovation
20. Product quality
21. Sustainable financial returns

DMA ensures full alignment with stakeholder priorities and compliance with the European Sustainability Reporting standards (ESRS), in preparation for the upcoming EU Corporate Sustainability Reporting Directive (CSRD). The top right quadrant features the double materiality topics that have been defined as being most material for Holcim in terms of both financial and impact materiality.

SUSTAINABILITY PILLARS AND MAIN TARGETS
REPORTING PROGRESS ON TARGETS YEARLY

	Unit	Base Year	Baseline	2023 Performance	2024 Performance	2024 vs. 2023	2030 Target	Achieved to Date
Specific CO_2 emissions – Net (Scope 1) – cement only[1]	$kgCO_2/t$	2018	590	549	538	-2%	420	-9%
Specific CO_2 emissions – Gross (Scope 1) – cement only[1]	$kgCO_2/t$	2018	623	591	582	-2%	-23 %	-7%
CO_2 emissions – electricity (Scope 2) – cement only[1]	$kgCO_2/t$	2018	46	35	32	-8%	-65 %	-30%
CO_2 indirect emissions from purchased fuels (Scope 3)[1]	$kgCO_2e/t$ purchased	2020	286	285	285	–	-20 %	–
CO_2 indirect emissions from purchased clinker and cement (Scope 3)[1]	$kgCO_2e/t$ purchased	2020	710	709	705	-1%	-25 %	-1%
CO_2 indirect emissions from downstream transportation (Scope 3)[1]	$kgCO_2e/t$ transported	2020	11	9	9	3%	-24 %	-19%
Cement Specific freshwater withdrawal[1]	L/t	2018	377	301	277	-8%	-33 %	-27%
Aggregates Specific freshwater withdrawal	L/t	2018	225	192	184	-4%	-20 %	-18%
Ready-mix Specific freshwater withdrawal	L/m^3	2018	212	206	200	-3%	-15 %	-6%
Waste derived resources – all segments[1]	Mt	2018	n/a	35	38	8%	70	55%
Construction demolition materials (CDM)	Mt	2020	6.6	8.4	10.2	20%	20	54%
Recycling ratio – Cement (waste used / production volumes)[1]	%	2020	22	21	22	5%	30	1%
High ESG impact suppliers qualified (% spend)	%	2017	n/a	93	88	-5%	100 %	88%
Specific dust emissions	g/t	2018	121	64	38	-40%	75	-68%
Specific NO_x emissions	g/t	2016	1,513	1,189	1,154	-3%	1,100	-24%
Specific SO_2 emissions	g/t	2016	357	230	235	2%	230	-34%
Cumulative contribution to create positive social impact	CHFm	2021	n/a	91	115	27%	350	33%

BIODIVERSITY	Unit	2022	2023	2024
Quarries assessed using BIRS methodology – active only[6]	%	51	67	**100**
Quarries assessed using BIRS methodology – active and non-active[6]	%	48	64	**100**
Quarries with rehabilitation plan in place[7]	%	100	100	**100**
Quarries with biodiversity importance[8]	#	256	294	**277**
Quarries with biodiversity importance with biodiversity management plans in place	%	100	100	**100**
Total rehabilitated area (active quarries)	ha	13,115	12,349	**11,233**
Total rehabilitated area (all areas)[9]	ha	17,448	14,855	**13,685**
Financing effects (direct and indirect costs) of biodiversity offsets	CHFm	NR	NR	**2**

CLIMATE & ENERGY

CIRCULAR ECONOMY

NATURE

PEOPLE

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#3 TNFD RECOMMENDATION GAP ANALYSIS & PROCESS TO CLOSE GAPS

GAP ANALYSIS AGAINST TNFD DISCLOSURE RECOMMENDATIONS

MOST GAPS ON RISKS & OPPORTUNITIES

GOVERNANCE	STRATEGY	RISK & IMPACT MANAGEMENT	METRICS AND TARGETS
*a) Describe the **board oversight** on nature related dependencies, impacts risks and opportunities*	*a) Describe the **nature-related dependencies, impacts risks and opportunities** the organization has identified **over the short, medium, and long term***	*a) Describe the **organization's processes for identifying, assessing and prioritizing** nature related dependencies, impacts risks and opportunities in its direct operations*	*a) **Disclose the metrics used by the organization** to assess **material nature related risks and opportunities** in line with its strategy and risk management process*
*b) Describe **management's role in assessing and managing** nature related dependencies, impacts risks and opportunities*	*b) Describe the **impact of nature-related dependencies, impacts risks and opportunities** on the organization's **businesses, value chain strategy, and financial planning***	*b) Describe the **organization's processes for identifying, assessing and prioritizing** nature related dependencies, impacts risks and opportunities in its upstream and downstream value chain*	*b) **Disclose the metrics** used to **assess and manage impacts and dependencies on nature***
*c) Describe **human right policy, board and management oversight on engagements with key local stakeholder** on assessing nature related dependencies, impacts risks and opportunities*	*c) Describe the **resilience of the organization's strategy**, taking into consideration **different nature-related scenarios***	*c) Describe the **organization's processes for managing** nature related dependencies, impacts risks and opportunities*	*c) **Describe the targets and goals** used to manage nature related dependencies, impacts risks and opportunities **and performance against targets***
	*d) **Disclose the location of assets and activities on direct operations, upstream and downstream** that meet the criteria for **priority locations***	*d) Describe **how processes** for identifying, assessing, prioritizing and managing nature-related nature related dependencies **are integrated into the organization's overall risk management***	

LEGEND

- Fully disclosed
- Partially disclosed
- Not disclosed

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RISK & OPPORTUNITIES ASSESSMENT PROCESS

TWO SEPARATED PROCESS HAVE BEEN DESIGNED

1 Physical risks

- Risks that result from the degradation of nature and consequential loss of ecosystem services
- These risks are usually location specific

- **Scope:** site (only CEM) / quarry level
- **Process:** Only risks to which the site is exposed as per Swiss RE tool (high / very high)
- **Approval:** Assessment coordinated with the site auditor, reviewed by the site manager and the country sustainability team

2 Transition risks & opportunities

- Risks that results from a misalignment of economic actors with actions aimed at protecting, restoring and/or reducing negative impacts on nature. Changes in regulation and policy, legal precedent, technology or investor sentiment and consumer preferences
- **5 categories of transition risks:**
  - Policy, Market, Technology, Reputation, Liability
- **3 categories of opportunities:**
  - Market/Products & Services, Resource Efficiency, Reputation

- **Scope:** country level, including all business segments
- **Process:** follows the Enterprise Risk Management (ERM) process. All risks / opportunities to be assessed
- **Approval:** Assessment coordinated by the country risk lead, all key functions / country Exco to be involved

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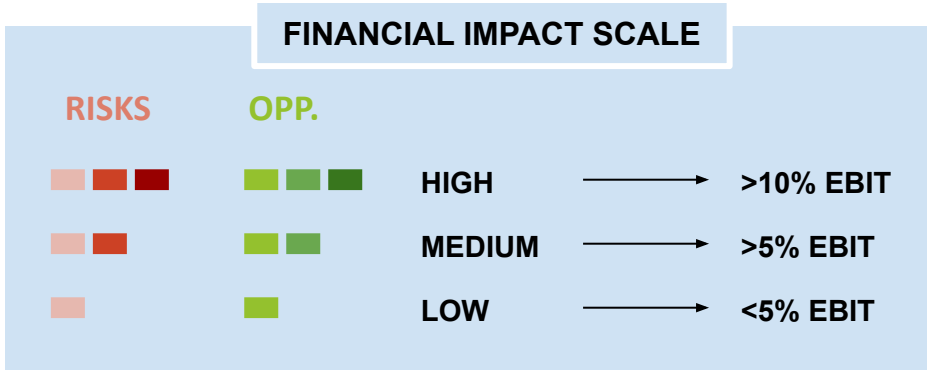
FINANCIAL IMPACT AND TIME HORIZON
RISKS & OPPORTUNITIES WERE LINKED TO A FINANCIAL IMPACT

Impact scale:

Aligned with the ERM process, the financial impact scale has been designed in order to facilitate consolidation of results, integration of all business segments and comparison of each risk or opportunity against each other



Time horizon:

Time horizon for the assessment between 2024 and 2030 in order to factor the risks/opportunities in light of the main triggers and macro trends which are to firmly accelerate at the end of the decade. Holcim's decarbonization targets & nature have been set for 2030. Finally, since all risks are interrelated, consistently aligned all time horizon to 2030

#4 PHYSICAL RISKS ASSESSMENT

ASSESSMENT OF PHYSICAL NATURE-RELATED RISKS

CURRENTLY ONLY WATER SECURITY RISK IS RELEVANT

ECOSYSTEM SERVICES	DEPENDENCY	+	BIODIVERSITY & ECOSYSTEM STATE	=	NATURE PHYSICAL RISK
Habitat intactness	No dependency		Moderate		Negligible
Pollination	No dependency		Low		Negligible
Air quality and local climate	No dependency		High		Negligible
Water security	High dependency		High		Very high
Water quality	Low dependency		Low		Low
Soil fertility	No dependency		Very low		Negligible
Erosion control	No dependency		High		Negligible
Coastal protection	No dependency		Not defined		Not defined
Food provision	No dependency		Not defined		Not defined
Timber provision	No dependency		Very low		Negligible

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NATURE PHYSICAL RISK QUESTIONS
‘HIGH’ OR ‘VERY HIGH’ WATER SECURITY RISK OF ASSETS IN SCOPE

QUESTIONS FOR SITES WITH HIGH & VERY HIGH RISK:

1. Do you have **mitigation plans** in place to prevent or reduce the impact of the water security risk?
   a. Does your mitigation plan include **harvesting rainwater**?
   b. Does your mitigation plan include equipping with **recycling** systems?
   c. Does your mitigation plan include switching to **non-freshwater** sources (e.g. sea water, wastewater treated)?
   d. Do you have another mitigation plan that is not listed above?

2. Do you expect water security risk to cause **revenue losses** due to lost production in **direct operations**?

3. Do you expect water security risk to cause **revenue losses** due to lost production in the **supply chain**?

#5 TRANSITION RISKS & OPPORTUNITIES ASSESSMENT

ASSESSMENT OF TRANSITION NATURE-RELATED RISKS
KEY QUESTIONS DONE AT COUNTRY LEVEL

Policy and Legal	
Nature policies	- More stringent upcoming policies - Emerging topic, growing concern for the next years
Market	
Increase in price of raw materials and natural inputs	- Water price / quotas - Higher price of natural resources such as limestone and gypsum
Slow acceptance of green premium	- Building codes / construction standard need to evolve - Regulatory incentives for nature friendly products - Slow market acceptance for nature friendly products

Technology	
Slow adoption of nature friendly technology	- Delay in adoption of next generation technology - Insufficient regulatory incentives to support investments in nature-friendly solutions - Lower performance than expected - Loss of competitive advantage
Reputation	
Reputational damage due to environmental footprint	- High freshwater consumption / impact on biodiversity - Conflicts with communities and controversies
Liability	
Liability arising directly or indirectly from legal claims	Liabilities due to our nature impact arising from local communities, authorities, NGOs might lead to material fines or legal costs

OPPORTUNITIES ASSESSMENT QUESTIONS
KEY QUESTIONS DONE AT COUNTRY LEVEL

Resource efficiency	
Natural resource efficiency (water, raw materials)	- More resource efficiency (processes requiring less natural resources, substitution of natural resources by ethically responsibly sourced inputs, less natural resources such as water) - Cost reduction and better resilience
Market / Products and Services	
Demand for nature-friendly solutions and products	- Consumers asking for more sustainable products in addition to low CO2 (eg. cement with less impact on biodiversity, concrete using less freshwater, aggregates not impacting biodiversity) - Increased our market shares in the range of products with a lower footprint on nature
Reputation	
Reputational capital	- Positive changes in perception concerning Holcim's nature impacts

#6 OUTPUT EXAMPLES & NEXT STEPS

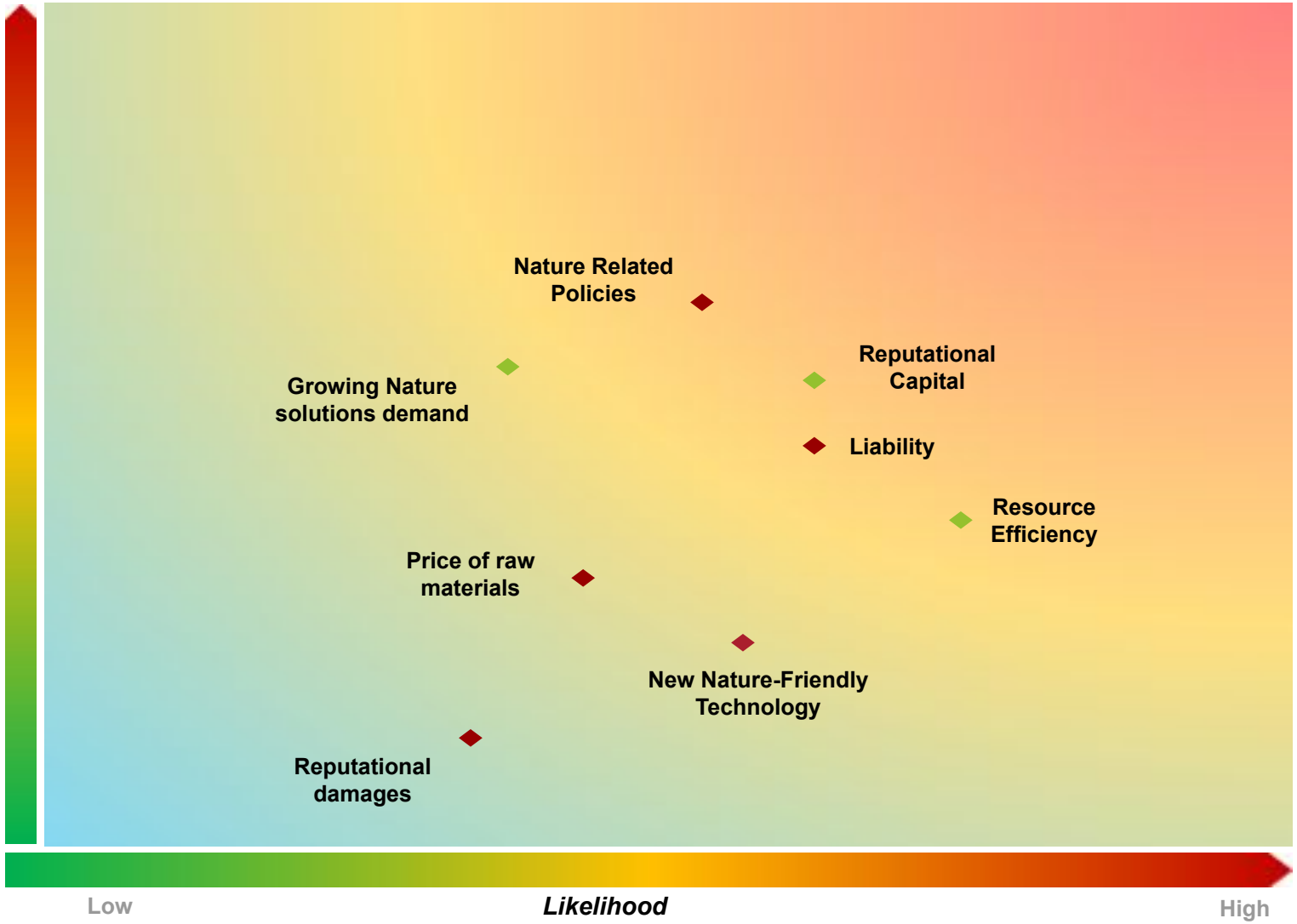
NATURE PHYSICAL RISKS RESULTS
IN SCOPE CEMENT SITES AND QUARRIES

PHYSICAL NATURE RISKS	CURRENT IMPACT LEVEL	# OF SITES EXPOSED	PROJECT FUTURE EXPOSURE
WATER SECURITY			

Risk Description	Potential impact	Adaptation and resilience strategy
Water security The indicator used is Water Availability and is based on the "Baseline Water Stress" of WRI that measures the ratio of water withdrawals to available renewable surface and groundwater at the catchment scale. Key Risk Indicators 	According to the ENCORE database, water security is a critical nature-related risk for the cement industry, as operations are highly dependent on sufficient water and freshwater supply and availability. Acute droughts can notably increase water scarcity, which may lead to business interruptions and financial losses. In addition, new regulations could lead to higher prices, restrictions or quotas on water which may limit production capacities and increase operational costs. Furthermore, the use of water in our operations in water-stress locations can strain relationships with local communities, potentially impacting Holcim's reputation.	Leveraging our annual risk assessment exercise, water security risk is regularly assessed at each manufacturing site using WRI Aqueduct and risk data from Swiss RE's RDS platform. The data and platform helps us identify high-risk locations, prioritize risk mitigations actions and design data-driven solutions. Water management plans have been implemented for locations at above medium-high water risk. This enables the operations to anticipate and adapt their business strategy to reduce freshwater withdrawal, engage with key local stakeholders, prepare for potentially more stringent regulations and new market conditions. Committed to a nature-positive future, Holcim aims to achieve a 33% reduction in freshwater withdrawal while making 75% of sites in water-risk areas water-positive by 2030. To achieve these goals, we are investing in projects aiming at reducing our dependence on freshwater through stewardship actions.

TRANSITION RISKS & OPPORTUNITIES SUMMARY RESULTS

KEY AREAS TO WATCH OUT



TOP RISKS

#1: Nature-related policies

- Increasing mining fee and natural resources supply restriction

#2: Reputational damages & Liability

- Unanticipated or above expected material fines or legal costs

#3: Price of raw materials

- Consumers unwilling to pay for additional cost in end products
- Securing sources to avoid dependence on third parties

#4: New nature-friendly technologies

- Slow adaptation or delay compared to the competition

TOP OPPORTUNITIES

#1: Growing Nature solutions demand

- Market education on nature friendly solutions and products
- Building codes encouraging use of nature-friendly products

#2: Reputational capital

- Regular and transparent disclosure of Holcim's nature impact
- Strengthening the portfolio of sustainable products and solutions

#3: Resource Efficiency

- Site limitations and lack of operational facilities

NEXT STEPS
TO IMPROVE REPORTING

1

RISKS & OPPORTUNITIES

- Update physical risks results based on updated Encore
- Expand business scope

2

METRICS

- Close gaps with Corporate Sustainability Reporting Directive (CSRD)
- SBTN - More freshwater quantity targets
- Location: to be discussed with legal team

3

UPSTREAM

- Physical risks: gathering location data from suppliers, use Swiss Re tool to understand nature-related physical risks from suppliers

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