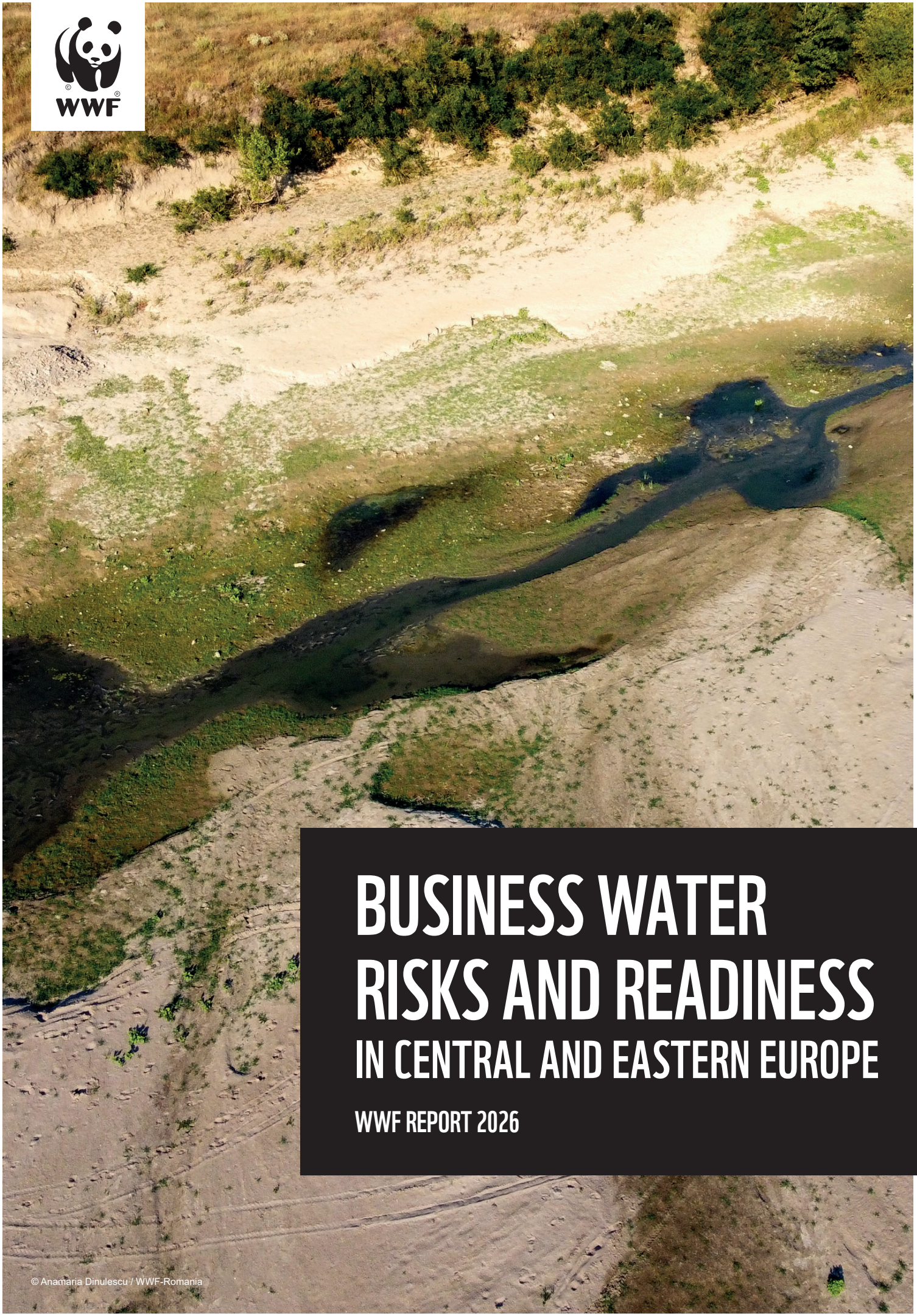


BUSINESS WATER RISKS AND READINESS

IN CENTRAL AND EASTERN EUROPE

WWF REPORT 2026

© Anamaria Dinulescu / WWF-Romania



About WWF

WWF is an independent conservation organisation with over 30 million followers and a global network active in nearly 100 countries. Our mission is to stop the degradation of the planet's natural environment and to build a future in which people live in harmony with nature by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable and promoting the reduction of pollution and wasteful consumption. As a member of the WWF global network, WWF-CEE exists to promote WWF's mission across six countries in Central and Eastern Europe. Member organisations include WWF-Bulgaria, WWF-Hungary, WWF-Romania, WWF-Slovakia, WWF-Ukraine, and WWF-Czechia. Find out more at wwfcee.org.

Authors:
Hannah Strickner, Fatima Bertran de Lis, Andris Siska, Nicholas Kearney, Emöke Györfi, Mihaela Popova

Coordination:
Emöke Györfi, Mihaela Popova, Laura Aldea

This report is based on a survey conducted by EY denkstatt Austria and commissioned by WWF-CEE. We also acknowledge the valuable support and expertise provided by EY in the development of this report, building on our broader collaboration on business water stewardship. We further acknowledge the contributions of colleagues across EY's and WWF's national offices in Central and Eastern Europe to the survey and the development of the report.

EY denkstatt

The information contained in this report represents the views and opinions of WWF. It does not necessarily represent the views or opinions of the independent experts and does not constitute an endorsement of the content.

WWF-CEE extends its gratitude to Coca-Cola Europe and Coca-Cola Hellenic Bottling Company for their financial support for this report as part of the Living Danube Partnership. Learn more about it here.

SUPPORTED BY Coca-Cola in Europe Coca-Cola HBC

Design: Marieta Vasileva

Published in October 2026 by WWF-CEE. Any reproduction as a whole or in part of this publication must mention the title and credit WWF-CEE as the copyright owner. Text © WWF-CEE, 2026. All rights reserved.

To cite this document, please use:
WWF (2026) Business Water Risks and Readiness in Central and Eastern Europe

WWF Central and Eastern Europe (WWF-CEE)
Address: Leopold-Moses-Gasse 4/2/40A,
AT-1020 Vienna, Austria
E-mail: office@wwfcee.org
Web: www.wwfcee.org
Telephone: +43-1-52 45 470-0



© Anamaria Dinulescu / WWF-Romania

CONTENTS

FOREWORD	4
EXECUTIVE SUMMARY	5
HOW TO READ THIS REPORT	6
WATER UNDER GROWING PRESSURE: IMPLICATIONS FOR THE ECONOMY OF CENTRAL AND EASTERN EUROPE	7
FROM WATER RISK EXPOSURE TO RESPONSE: INSIGHTS FROM COMPANIES	12
BUSINESS WATER MATURITY IN CENTRAL AND EASTERN EUROPE	22
BUILDING A WATER-RESILIENT BUSINESS	28
APPENDIX	32
REFERENCES	36

FOREWORD

Water has long been treated as something businesses can largely take for granted: a reliable input, available when and where it is needed. Across Central and Eastern Europe, that assumption is becoming increasingly difficult to sustain.

Recent years have shown how quickly drought, low river levels, flooding and declining water quality can translate into disruption for agriculture, energy, manufacturing, transport and other sectors. At the same time, businesses depend on water in ways that extend far beyond the water used within their own facilities. Their suppliers, infrastructure, communities and the river basins in which they operate are all part of the same interconnected system.

As I am writing these lines, the extreme drought and water scarcity of summer 2026 has shut down or threatened to shut down two nuclear energy facilities across Hungary and Romania, caused significant damage to agriculture, and several communities across Central and Eastern Europe were requested to save energy and water due to the disruptions in water and energy supply, all because of historically low water levels on the Danube, its tributaries, and groundwater.

This report provides an important snapshot of how businesses across our region are responding to this changing reality. Companies clearly recognise that water matters, and many have already experienced its effects on their business. Yet the report also reveals a significant gap between recognising water-related risks and being prepared to manage them, particularly beyond companies' own operations and across their value chains.

This is the water action gap at the heart of this report: awareness is growing faster than preparedness and action.

Closing that gap does not mean that every company needs to begin with a comprehensive water strategy. It means starting with the questions that matter most: **Where does our business depend on water? Where are we most exposed? What happens if a critical supplier, production site or transport route is affected by drought, flooding or declining water quality? And where can action today prevent disruption and higher costs tomorrow?**

There is also a wider perspective we should not lose. Water is a shared resource. A company can become more efficient within its own facilities and still remain vulnerable if the river basin on which it depends is degraded or under increasing pressure. Building genuine water resilience therefore requires us to look beyond the factory fence, working with suppliers, communities, public authorities and other water users, and investing in the healthy freshwater ecosystems on which our economies ultimately depend.

At WWF, we believe that businesses have an essential role to play in this transition. Companies that understand their water dependencies early and integrate them into investment, procurement and risk management will be better equipped to navigate a future in which water conditions are less predictable. Through tools such as the WWF Water Risk Filter, through partnerships, and collective action, we want to help businesses move from understanding risk to building resilience.

This report is intended as a practical contribution to that journey. We hope it encourages companies across Central and Eastern Europe not simply to ask how much water they use, but where their businesses depend on healthy and resilient freshwater systems, and what they can do today to help secure them for the future.



ANDREAS BECKMANN

CEO, WWF CENTRAL AND EASTERN EUROPE



EXECUTIVE SUMMARY

Water risk in Central and Eastern Europe is becoming a business issue, not only an environmental concern. It can affect production continuity, sourcing, logistics, product quality, compliance and long-term resilience. This report shows that companies across Bulgaria, Czechia, Hungary, Romania, Slovakia and Ukraine increasingly recognise this shift — but recognition is not yet translating into action at the pace required.

The central finding is the existence of a water action gap. In simple terms, while companies increasingly recognise the importance of water, many have yet to translate this awareness into meaningful action. More than half of respondents — 52% — experienced at least one negative water-related impact in the past five years, most often operational disruption or damage (24%) and increased costs for externally sourced water (21%). Looking ahead, 58% expect water-related risks to have a moderate or significant business effect over the next five years. Yet only 7% describe themselves as very prepared. Water is already visible in business experience and expectations, but preparedness remains limited.

The gap is clearest beyond the company boundary. 46% of respondents have evaluated water-related risks in their own operations, compared with 23% in their respective supply chain. This matters because many water risks begin outside direct operations: through suppliers, raw materials, logistics routes, shared infrastructure, river basin conditions, regulation or stakeholder expectations. A company may manage water efficiently on site and still be exposed if the basin, supplier region or logistics route it depends on is under pressure.

Strategy, targets, and investment show the same uneven maturity. 53% of respondents do not yet have a dedicated water strategy. Targets focus mainly on water quantity, efficiency or intensity (47% of target selections) and water quality (24%), while supply-chain water targets remain limited (3%). Investment is also not yet shifting at scale: nearly half expect water-related investment to remain unchanged over the next three years, while 24% expect an increase and only 4% expect a significant increase.

Analysing the responses at the country and sector level adds nuance, but doesn't modify the overall story. On average, respondents from Slovakia show comparatively stronger preparedness and investment signals, those from Czechia the highest uptake of water-related targets, and those from Ukraine appear earlier in their maturity journey. Across sectors, exposure is highest among respondents from Metals & Mining and Agri- & Food Production, while those from the Energy sector show the strongest planned increase in water-related investments.

The maturity picture is therefore less about whether companies have started to act, and more about whether action is coherent enough. Only a small minority of companies demonstrate consistently high maturity across all dimensions analysed, while many others remain in developing or advancing stages where foundations exist but are not yet consistently linked to implementation or investment.

For companies, the implication should be clear: move from broad recognition to prioritised and funded action. Closing the water action gap requires a sharper view of where water could materially affect business continuity, costs, permits, suppliers, infrastructure, customer delivery or stakeholder trust — and then connecting that view to ownership, context-based targets, value-chain engagement and investment in the locations, suppliers and processes where disruption would matter most.

HOW TO READ THIS REPORT

Based on a survey of businesses across Central and Eastern Europe, this report provides actionable insights to help companies better understand and respond to water-related risks, highlighting key findings and practical steps to strengthen and scale up freshwater stewardship.

In this report, CEE refers primarily to the six countries covered by the survey: Bulgaria, Czechia, Hungary, Romania, Slovakia and Ukraine, while broader regional or European evidence is used, where relevant, to provide context.

In brief, the report should be read as:

- a business-oriented snapshot on how companies in CEE perceive, assess and manage water-related risks
- an indication of current maturity levels, rather than a statistically exhaustive market assessment
- a practical starting point for understanding exposure, prioritising and strengthening action in water stewardship in a structured way

HOW THE SECTIONS ARE STRUCTURED

The report is structured into sections that move from the wider economic context, to survey findings and maturity patterns, to practical steps for closing the water action gap and building water resilience.

- **Water under growing pressure: implications for the economy of Central and Eastern Europe:** Sets the regional context and explains why growing pressures on water are becoming increasingly material for businesses and the wider economy across CEE.
- **From water risk exposure to response: insights from companies:** Presents the survey findings on freshwater reliance, experienced impacts, risk assessment, preparedness, strategies, targets and investment.
- **Business water maturity in CEE:** Connects the survey findings to show where companies are progressing, where maturity remains uneven, and how differences across respondents from countries and sectors should be interpreted.
- **Building a water-resilient business:** Explains the water action gap and provides practical actions companies can take to strengthen preparedness, investment, value-chain engagement and water stewardship.

HOW TO INTERPRET THE SURVEY RESULTS

The survey findings should be interpreted as an indicative perception of business awareness, exposure and preparedness. They help identify where companies already recognise water as a relevant issue, where management practices are still developing, and where there may be a gap between perceived relevance and structured action.

Throughout the report, the focus is on enabling progress over perfection: helping companies take practical steps today, while water data, systems or governance structures may still be developing.



WATER UNDER GROWING PRESSURE: IMPLICATIONS FOR THE ECONOMY OF CENTRAL AND EASTERN EUROPE

Water is becoming a strategic economic issue for Central and Eastern Europe (CEE).

Water supports industrial production, agriculture, energy systems, municipal supply, inland transport and the freshwater ecosystems that underpin regional resilience. Yet these systems are under growing pressure from pollution, over-abstraction, infrastructure gaps, competing water uses and climate change. The result is a business-relevant challenge: where water availability, quality or flood protection deteriorate, companies may face disruption, higher costs, permitting constraints and weaker supply reliability.

Freshwater should therefore be understood not only as an environmental resource, but as an economic asset and shared infrastructure. It connects company operations with suppliers, communities, ecosystems and river basins. When freshwater systems are degraded or unreliable, the effects can extend beyond individual sites to infrastructure costs, investment attractiveness, local resilience and stakeholder trust (1).

WATER RISK STARTS OUTSIDE THE COMPANY FENCE

Water risk is not determined only by how much water companies use directly. It is also shaped by the condition of the wider water system on which their sites, suppliers and communities depend. The following terms are used throughout the report:

- **Freshwater dependency** refers to a company's reliance on water availability and quality for operations, suppliers, logistics, products or customer use.
- **River basin** (including its sub-units: sub-basin, watershed, or catchment) means the geographical area where rainfall and surface water drain into the same river system; it is often the most relevant scale for understanding shared water risks. Whereas most of the area covered in this survey lies within the Danube basin, the majority of the Czech Republic belongs to the Elbe River Basin.
- **Blue and green water** show that water is more than what flows through pipes: blue water is found in rivers, lakes and groundwater, while green water is stored in soils and used by plants.
- **Water quality** refers to the chemical and physical condition of water and determines whether available water can be used safely for people, ecosystems, agriculture or business processes.
- **Ecological status** indicates the health of rivers, lakes and other water bodies, including the condition of aquatic life, habitats and supporting water flows.

WATER SITUATION IN CENTRAL AND EASTERN EUROPE

According to the European Environment Agency (EEA), Europe's water resources are under significant pressure. Its *Europe's State of Water 2024* report identifies three priorities to help improve the state of water: protecting and restoring aquatic ecosystems, reducing pollution, and adapting to water scarcity, drought and flood risks (2). **Water stress — when demand for water exceeds available supply or reduces water quality — already affects around 20% of Europe's territory and 30% of its population each year.** For CEE businesses, this matters because water quantity-related phenomena such as droughts, low river flows and floods can affect production, inland transport, energy systems and supply chains (2).

Water quality is an equally important part of the risk picture. The EEA reports that, in 2021, only 37% of Europe's surface water bodies achieved good or high ecological status, meaning healthy aquatic life, habitats and water flows, and only 29% achieved good chemical status (2). Pressures include chemical pollution, emissions from coal-powered energy generation, diffuse pollution from agriculture, changes to river morphology and habitat degradation.

In the Danube Basin, nutrient pollution from agriculture, settlements and industry is a key driver of eutrophication, a process in which excess nutrients fuel algal growth, reduce oxygen levels and degrade aquatic ecosystems. The resulting decline in water quality can increase treatment and management needs for downstream users, including businesses that depend on these water resources (3).

Water challenges in CEE are systemic, cross-sectoral, and landscape-wide: they are shaped by basin-level pressures and increasingly amplified by climate change. Around 80% of natural floodplains along the Danube and its main tributaries have been lost over the past two centuries, reducing space for flood retention, water filtration, habitats and natural water regulation (3, 4). Entire landscapes have been cut off from the natural flooding they depend on and largely drained, while river stretches have been reduced to narrow strips of water, disconnected from their natural floodplains. Combined with drought and increasingly high summer temperatures, these effects will be amplified.

For businesses, this means water is not only a utility input. Reliable access to water of adequate quality supports production continuity, product quality, workforce wellbeing, healthy communities, infrastructure resilience and supply-chain stability across sectors including agriculture, food and beverage, manufacturing, energy and services.

Water dependency is especially visible in water-intensive industries. In agriculture and food processing, water availability influences production volumes and output quality. In energy, thermal power generation and cooling processes rely on stable water flows and temperatures. In manufacturing, water may be embedded in cleaning, cooling, processing or product formulation. The Intergovernmental Panel on Climate Change (IPCC) identifies water scarcity, flood damage, and agricultural losses linked to heat and drought among key climate-related risks for Europe, underlining that water disruption can have operational and financial implications (5).

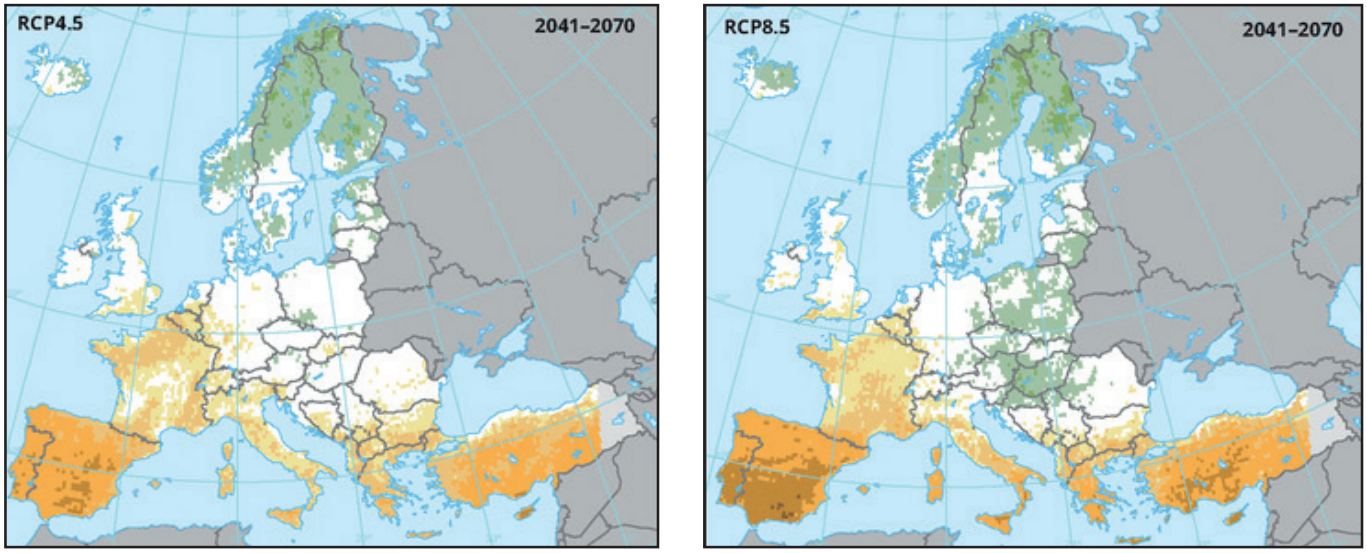
Climate change is expected to make these pressures more volatile. Projections point to more frequent and intense heatwaves, droughts and heavy precipitation events across Europe. Many water-related risks are already shaped by land and water management, infrastructure development and river modification; climate change can amplify these pressures by increasing the frequency and severity of both low-water and flood conditions. **For CEE businesses, this means that both too little and too much water are likely to become more relevant for production planning, logistics, insurance, infrastructure resilience and long-term investment decisions,** as illustrated in Figure 1 (5, 6, 7).

RIVER BASINS: THE RELEVANT GEOGRAPHIC SCOPE FOR WATER RISK

The relevant geographic dimension for water is the river basin or sub-basin (also called watershed). Water risks often become most tangible at this level, where industry, agriculture, cities, ecosystems and infrastructure rely on the same water system.

- The Danube links much of Central and Eastern Europe and supports drinking water, habitats, industry, agriculture, transport and energy production. Around 83 million people live in the Danube Basin, with some 20 million relying on the river for drinking water.
- Around 80% of natural floodplains along the Danube and its main tributaries have been lost, reducing space for flood retention, habitats and natural water regulation (3, 4).
- Nutrient pollution illustrates how upstream and downstream pressures accumulate at basin level, as pollutants entering rivers upstream can accumulate with other sources of pollution and affect water quality further downstream (3).

Why it matters: a company can manage its own water use well and still be exposed if the basin it is in is under stress.



Changes in meteorological drought frequency for different scenarios

Figure 1: Projected changes in the frequency of meteorological droughts for 2041–2070 compared with 1981–2010, under two emissions scenarios: RCP4.5 (left) and RCP8.5 (right). Source: European Environment Agency (EEA), Climate change impacts in Europe (7).

Recent droughts show how quickly water stress can become business disruption. The severe European drought in 2022 affected agriculture, energy and river transport, with European river discharge the second lowest on record and 63% of rivers recording below-average discharge; in Romania, low Danube levels constrained river traffic and grain-export logistics (8, 20). In 2026, prolonged heat, drought and record-low Danube levels again disrupted transport, tourism and energy systems across parts of Central and Eastern Europe. Reporting described reduced vessel loads and long waits in Slovakia, Hungary, Romania and Bulgaria, ferry suspensions between Romania and Bulgaria, and the evacuation of almost 200 passengers from a cruise ship that ran aground in Bulgaria. Low river levels also affected energy security, with Hungary's Paks nuclear plant and Romania's Cernavodă plant reducing or shutting down output because of insufficient Danube cooling water, while Romanian authorities redirected water towards Cernavodă. Broader drought conditions also affected Czechia, Slovakia and Hungary through agriculture, river navigation and power generation, while the European Drought Observatory reported alert drought conditions across the Danube basin, including areas of Czechia, Slovakia, Hungary and Romania, with some improvement in Ukraine. **The business message is clear: water stress can translate into operational disruption, energy constraints, transport bottlenecks and tourism impacts.** (22, 23, 24, 25).

Flood risk adds another layer of exposure. Warmer air can store more humidity, which is released when the air cools down. The EEA notes that intense rainfall has already increased in parts of Europe, contributing to floods and growing flood risks, while flood events can cause loss of life, economic damage and ecosystem impacts (2). Copernicus and the World Meteorological Organization (WMO) reported that 2024 was Europe's warmest year on record and that storms were often severe and flooding widespread, affecting an estimated 413,000 people (10). **For businesses, the relevant distinction is between chronic risks, such as water scarcity and declining water quality, and acute risks, such as floods and extreme precipitation.** Both can affect assets, operations, logistics, insurance and investment decisions.

The evolving water situation in CEE is therefore a business issue as much as an environmental one. It shapes the physical, regulatory and economic conditions under which companies operate, making water relevant for continuity, investment planning and long-term resilience.

Against this backdrop, the key question is how prepared companies are to understand and manage water as a business risk. WWF and EY therefore conducted a survey on water risks and water stewardship among businesses across Bulgaria, Czechia, Hungary, Romania, Slovakia and Ukraine. The results provide an indicative view of how respondents perceive, rely on and manage water, highlighting dependencies, risks, management practices and gaps between water's strategic relevance and the structures currently in place.

WATER RISK, OPPORTUNITIES AND THEIR BUSINESS IMPLICATIONS

As freshwater systems in CEE come under pressure, water-related disruption becomes more relevant for business planning and decision-making. **Water risk rarely appears only as a higher water bill.** It is more likely to emerge through production disruption, higher input costs, supplier failure, delayed permits, infrastructure damage, customer expectations, investor scrutiny or reduced flexibility in future investment decisions.

Water risk refers to the ways in which water availability, water quality, regulation, shared basin conditions or stakeholder expectations can affect business continuity, costs, permits, supply reliability, infrastructure or trust. It is commonly understood across physical, regulatory and governance, market and supply-chain, and reputational dimensions**. In practice, these risks often overlap:** a drought can disrupt production, trigger stricter water allocation, increase supplier costs and draw public attention to how water is used locally.

Companies that do not understand their water exposure may miss detecting and addressing risks outside direct operations, such as suppliers in stressed basins, logistics corridors affected by low river levels or flash floods, or communities and ecosystems affected by competing water use. These risks can remain invisible in routine management processes until they create operational constraints, additional costs or reputational pressure.

Table 1: Risk types related to water for businesses.

RISK TYPE	HOW IT AFFECTS BUSINESS	WHAT TO WATCH
PHYSICAL RISK	Too little, too much or water unfit for use can restrict production, irrigation, cooling, cleaning, transport, energy generation or site access. The EEA reports that water stress affects around 20% of Europe's territory and 30% of its population each year, while climate change is expected to increase both drought and flood risks (2).	Priority sites, critical processes, water quality limits, drought exposure, flood exposure and dependence on vulnerable infrastructure.
REGULATORY AND GOVERNANCE RISK	Changes in permits, allocation rules, discharge limits, enforcement, disclosure expectations or public policy can affect compliance costs, operating flexibility and investment planning. The European Commission's Water Resilience Strategy points to stronger expectations around efficiency, reuse, infrastructure modernisation, disaster preparedness and a water-smart economy (11).	Permit conditions, discharge limits, allocation rules, reporting requirements, public policy changes and capital expenditure needs.
MARKET AND SUPPLY-CHAIN RISK	Water-related disruption can affect suppliers, commodities, infrastructure, logistics routes or customer markets beyond the company's own gate. CDP found that one in five companies reported supply chain water risks with potential substantive financial or strategic impact, with at least US$77 billion identified as under threat across responding companies (12). Companies engaging suppliers are seven times more likely to identify and manage water risks effectively (21).	Water-stressed supplier regions, agricultural commodities, energy inputs, packaging, minerals, logistics routes and customer markets.
REPUTATIONAL AND SOCIETAL RISK	Because water is shared, company water use and impacts are judged in relation to local water realities. Scrutiny can increase where basins are stressed, ecosystems are degraded, or communities face unreliable access, potentially affecting trust and licence to operate.	Community concerns, NGO attention, media scrutiny, local water scarcity, ecosystem degradation and perceived fairness of company water use.
CLIMATE AND NATURE LINKS	Water connects climate adaptation, food production, energy systems, biodiversity, public health, infrastructure and industrial competitiveness. The World Economic Forum identifies extreme weather events, critical change to Earth systems, biodiversity loss and ecosystem collapse, and natural resource shortages among the most severe long-term global risks (9).	Overlap with climate adaptation, nature strategy, biodiversity impacts, basin health, infrastructure resilience and transition planning.



1,000-year flood event at the Wien River during Storm Boris in September 2024. Source: Hauer et al. (2025) (26).

The opportunity side follows the same logic. Companies that improve water efficiency, reduce losses, reuse water, strengthen wastewater treatment, protect source water areas or invest in nature-based solutions can reduce exposure while creating business value. Benefits may include lower disruption risk, more resilient production, improved permitting conditions, stronger stakeholder relationships, reduced input costs and a more credible sustainability position.

The key issue for companies is to understand where they are exposed, how prepared they are and what needs to change. Companies that wait until water risks become acute may face higher costs and fewer response options. Those that act earlier can protect continuity, build trust with regulators and communities, and make better investment decisions in a region where water conditions are becoming less predictable. The survey results that follow show how far respondents have already moved in this direction — and where dependency, preparedness and investment still do not fully match the level of water-related risk.

FROM WATER RISK EXPOSURE TO RESPONSE: INSIGHTS FROM COMPANIES

Water becomes meaningful for companies when it affects decisions about investment, supply security, disruption management and business resilience. *Business Water Risks and Readiness in Central and Eastern Europe* survey and report provide an indicative view of how responding companies across Bulgaria, Czechia, Hungary, Romania, Slovakia and Ukraine perceive their freshwater dependency, where water-related impacts are already visible and how prepared they feel to respond. The figures that follow describe companies' water attitudes and readiness across the aspects of reliance and experienced impacts to risk assessment, preparedness, strategies, targets and investment. Together, these indicators provide a step-by-step picture of business water maturity. (Figure 2).

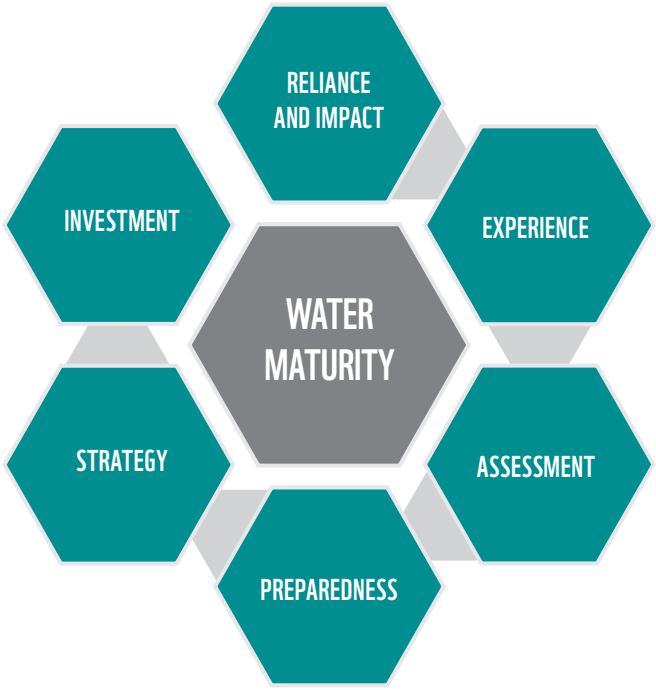


Figure 2: Aspects of water maturity explored in this survey.



The results should be read as an indication of the business awareness and management maturity, not as a statistically representative assessment of companies in the region. Their value lies in showing where water is already part of business thinking, where companies are beginning to act and where blind spots remain — particularly beyond direct operations and into the supply chain.

The first survey findings focus on two linked questions: where companies rely on freshwater across the value chain, and where they have already experienced water-related impacts. **The pattern is clear: freshwater reliance is most visible in own operations and upstream supply chains, making these the most immediate starting points for understanding water-related exposure.**

Figure 3 shows that freshwater reliance is concentrated closest to core business activity. In own operations, 19% of respondents describe reliance as critical, 11% as high and 21% as moderate. Upstream supply chains show a similar but less concentrated pattern, with 8% reporting critical reliance, 15% high reliance and 18% moderate reliance. These are the parts of the value chain where water disruption can most directly affect production, raw material availability, supplier reliability and operational flexibility.

Downstream activities appear less central for many respondents. Logistics and distribution are most often rated low or not applicable, and the same pattern appears for product or service use and end-of-life activities. This does not mean these areas are irrelevant; rather, it suggests that wider value-chain dependencies may be less consistently visible than direct operational water use and should be tested where sector or business context indicates potential relevance.

Reliance becomes most important for business when it turns into an experienced constraint. The survey therefore also asked whether companies had faced significant negative water-related effects in the past five years.



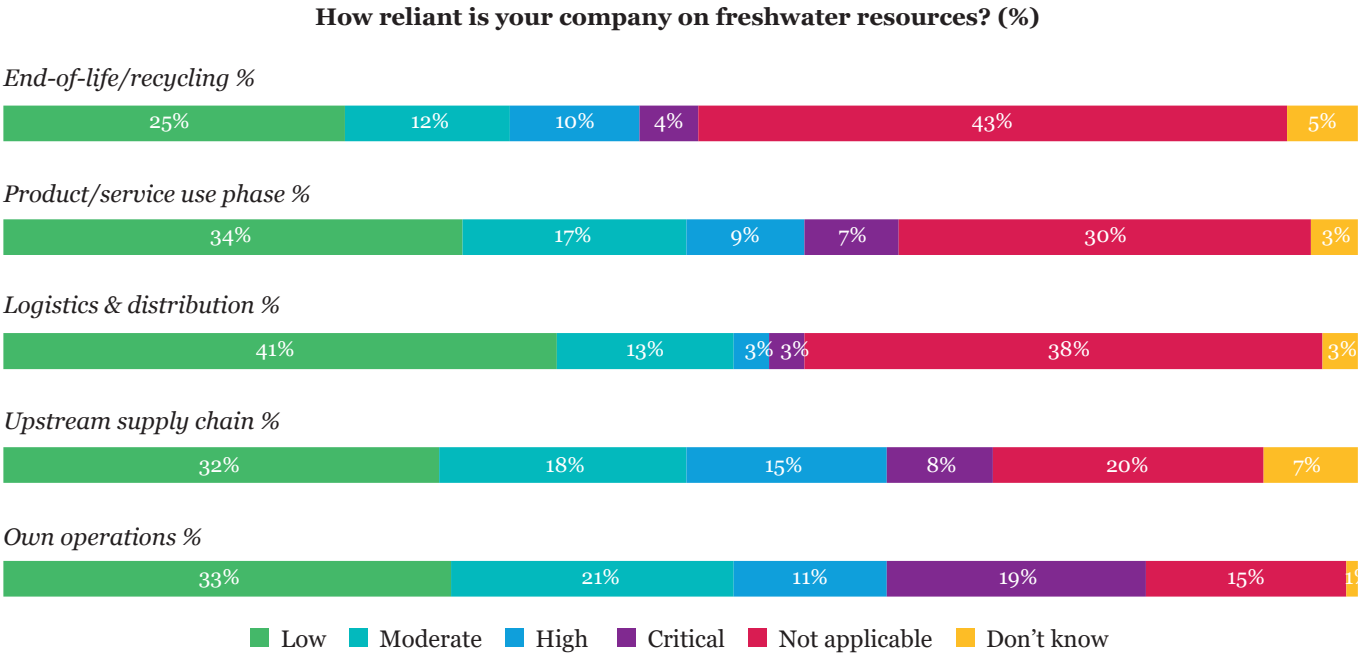


Figure 3: Reliance of companies on freshwater resources across their value chain.

Water-related impacts are not yet universal, but they are already material for many respondents. 52% of respondents have experienced at least one form of negative water-related impact, showing that water is already a tangible business issue for the majority of the respondent base. At the same time, 42% report no significant negative water-related effects in the past five years. Figure 4 shows how different negative impacts were ranked by those who experienced some tangible impacts. The most common reported effects are operational disruption or damage, selected by 24% of respondents, and increased costs for externally sourced water, selected by 21%. Regulatory cost increases, selected by 14%, add a further signal that water pressure is already translating into business costs for some companies.



Which significant water-related negative effects has your company experienced in the last 5 years?

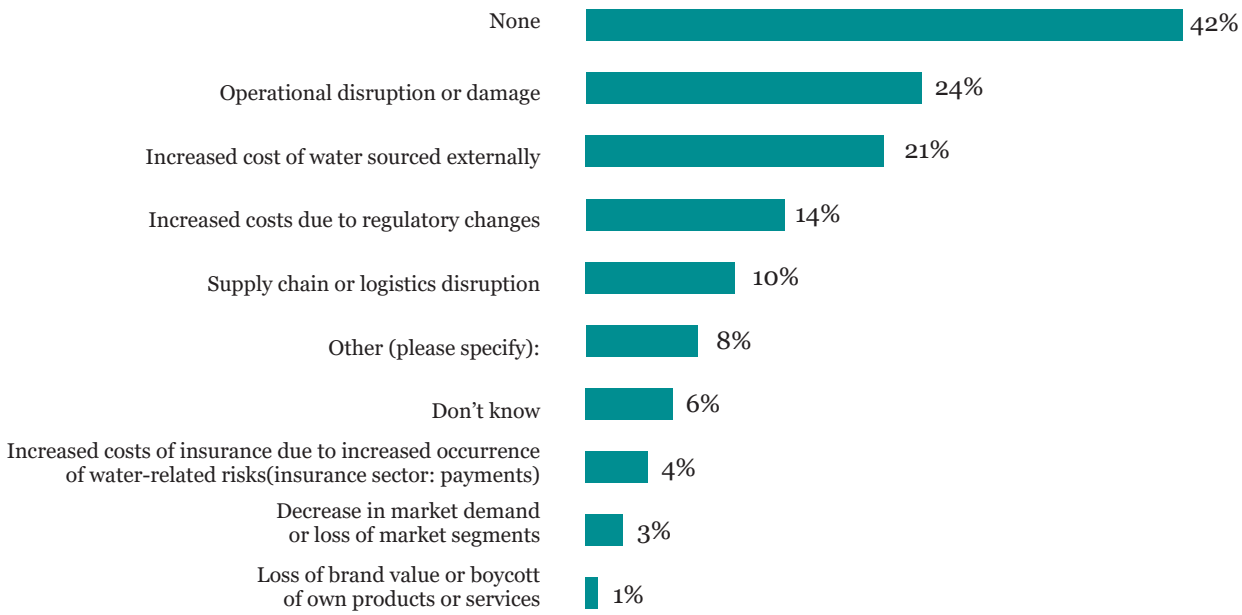


Figure 4: Significant water-related negative effects experienced by companies in the last 5 years (% of respondents choosing each option in a selection of multiple options).

The first findings establish the chapter's core logic: water becomes most visible where it is closest to operations, and most urgent where it has already affected continuity or costs. Direct operations and upstream sourcing are therefore the logical starting points for deeper assessment. At the same time, downstream and wider value-chain exposure should not be dismissed; it should be tested where sector context, customer use, logistics or product lifecycle factors suggest potential relevance.

The next question is whether companies are turning visible reliance and past impacts into systematic risk assessment and preparedness. This subsection examines how far companies have progressed in identifying where water-related risks may arise and how prepared they are to manage them.

Assessment remains stronger inside the company boundary than across the supply chain. Figure 5 shows that 46% of respondents have evaluated water-related risks in own operations, compared with 23% supply chain. This points to a practical assessment gap: companies are making more progress in evaluating risks where they have direct control, while risks linked to suppliers, raw materials and sourcing regions are less consistently assessed.

WWF WATER RISK FILTER

WWF Water Risk Filter is a free online tool that helps companies identify, assess and prioritise water-related risks across their operations and supply chains. It combines company-specific information with location-based water data to show where businesses may be exposed to physical, regulatory and reputational water risks, helping them identify priority locations and inform water stewardship actions.

Has your company evaluated its water-related risks, and for which part of the value chain?

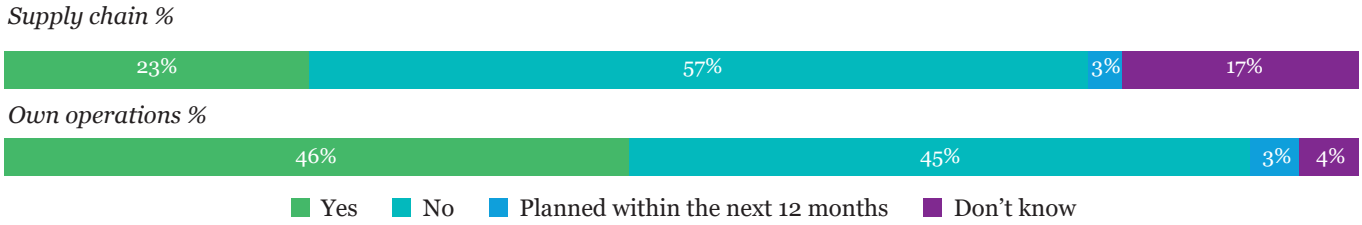


Figure 5: Status of corporate water risk assessment in own operations and supply chain.

Companies were also asked which water-related pressures they expect to become most relevant in the coming years. Since respondents could select up to five risks, the results should be read as a ranking of perceived relevance rather than mutually exclusive categories. **The expected risk landscape is dominated by physical water risks: both too little and too much water are high on the business radar.**

What are the most significant water-related risks your business (incl. national supply chain) might face in the next 5 years?

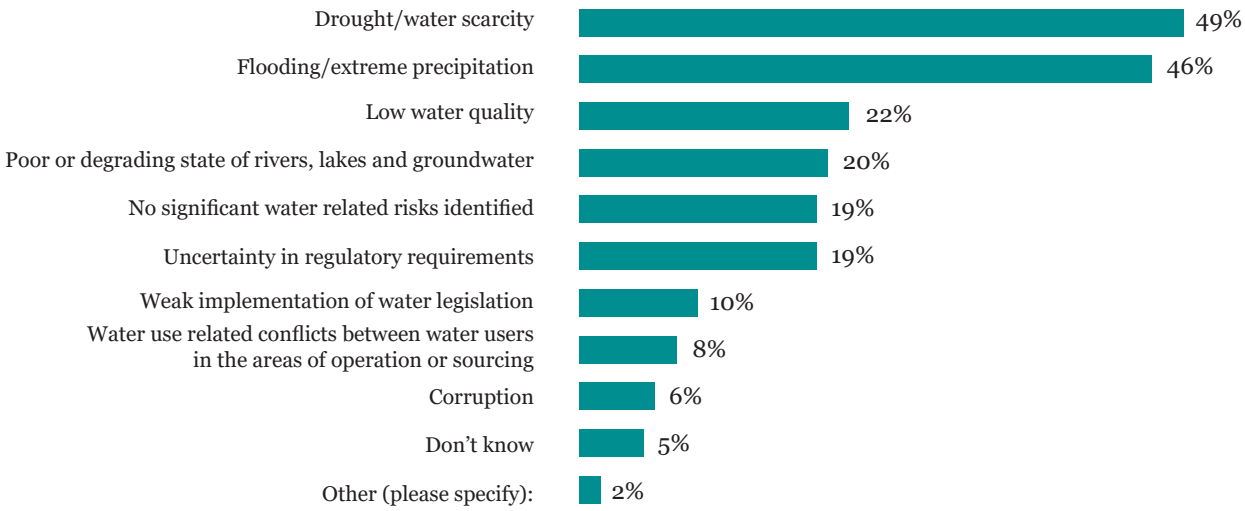


Figure 6: Most significant anticipated water-related risks (incl. national supply chain) in the next 5 years (the percentage shows the share of respondents who have selected the options listed in a list allowing multiple selection).

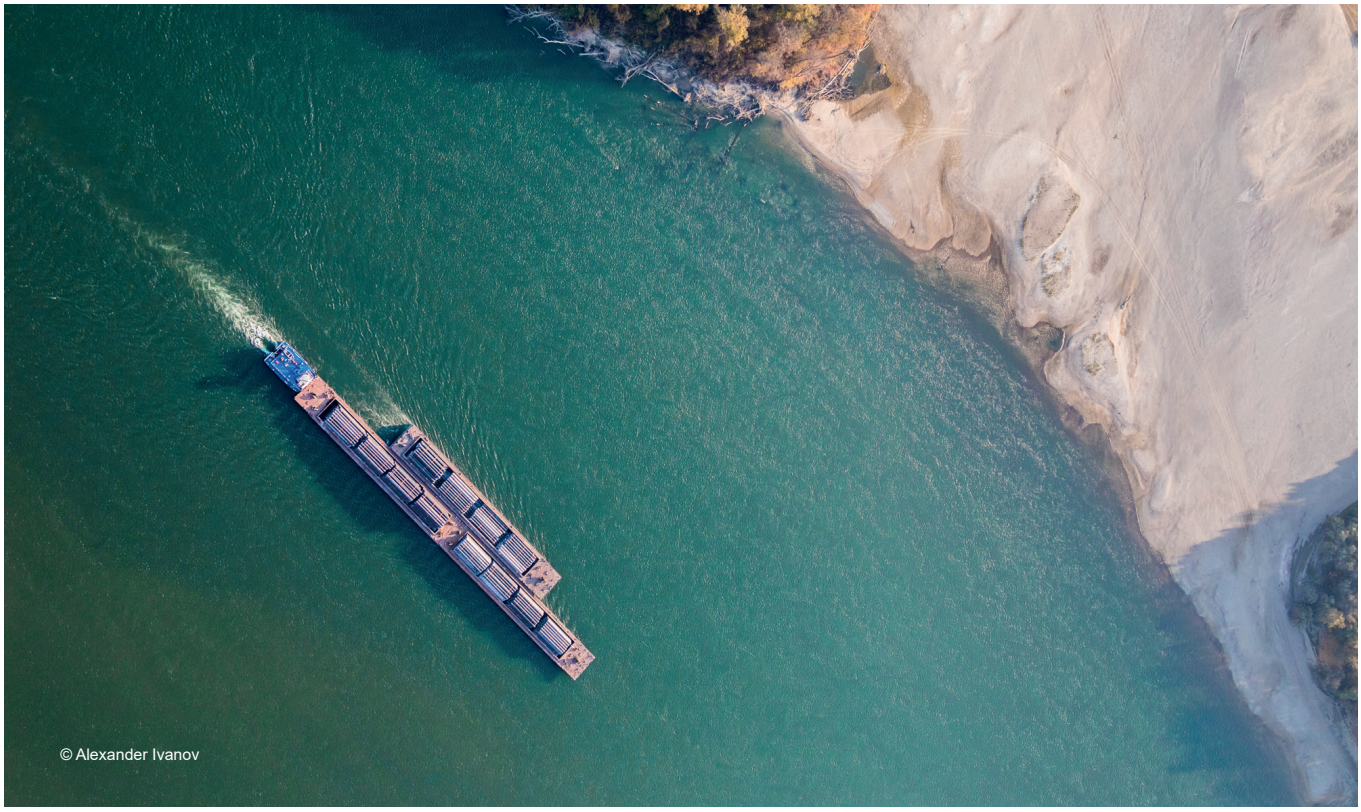


Figure 6 shows that drought and water scarcity are most frequently selected, by 49% of respondents, followed by flooding and extreme precipitation, which was also selected by 46% of respondents. The next tier points to risks linked to water quality and ecosystem condition: low water quality is selected by 22%, and the poor or degrading state of rivers, lakes and groundwater by 20%. Regulatory uncertainty was also identified as a concern by 19% of respondents. Together, the results show that business concerns about water are broad rather than focused on a single type of risk, spanning immediate disruption from droughts and floods as well as longer-term pressures related to water availability, quality and regulation.

The survey also looks at the other side of the relationship: how business activities may affect water resources. This matters because water stewardship requires companies to understand both their exposure to water risks and their own potential impacts on water systems.

Figure 7 reveals a clear gap in how companies assess their impacts on water. Almost half of respondents (48%) have evaluated impacts from their own operations, but only 25% have done so across their supply chains. Companies therefore have a much clearer view of impacts they directly control than of those linked to suppliers, raw materials and sourcing locations.

Has your company evaluated the potential impact of its business activities on water resources, and for which part of the value chain?

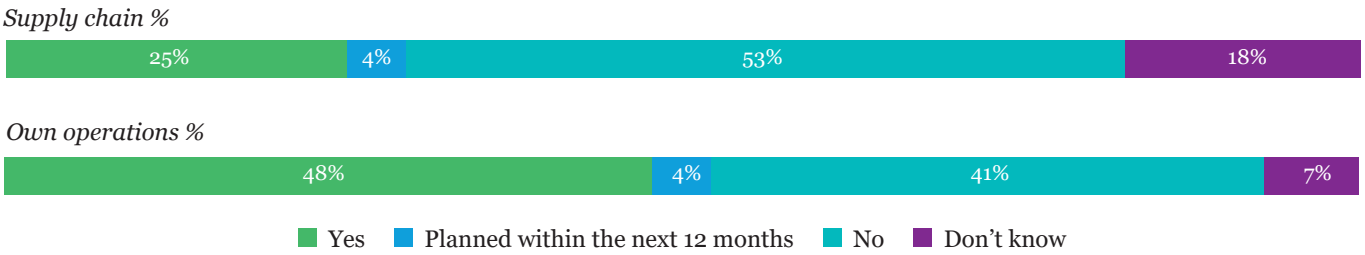


Figure 7: Status of companies' assessment of the potential impacts of their business activities on water resources in their own operations and supply chains.

As a conclusion, the main management gap sits in the supply chain, where both risk assessment and impact assessment are less developed. This leaves companies with potential blind spots around suppliers, raw materials and sourcing locations, even where water risk is already moving onto the business agenda.

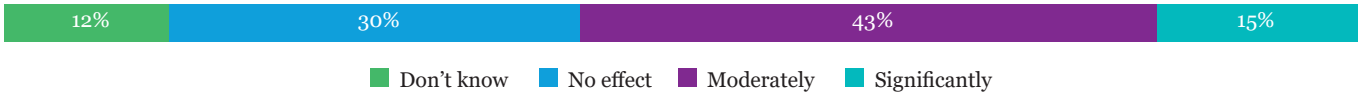
Assessing water-related risks and impacts is only part of the picture; the next question is how strongly companies expect these risks to affect their business and how prepared they are to respond.



Companies expect water-related risks to affect their business, but their preparedness to manage these risks remains more limited. Figure 8 shows that 58% of respondents expect water-related risks to have a moderate or significant effect on their business over the next five years, while 30% expect no effect. On preparedness, the largest group describe themselves as moderately prepared (41%), followed by 26% who feel only slightly prepared. Only 7% state that they are very prepared. The results suggest that water risk is increasingly recognised as relevant, but many companies are still building the capabilities, response plans and internal confidence needed to manage it effectively.

How does your company expect water-related risks to affect the business over the next 5 years?

Expected effects of water-related risks:



How prepared is your company to manage water-related risks?

Preparedness to manage water-related risks:



Figure 8: Expected change in effects of water-related risks on the business in the next 5 years and preparedness to manage water-related risks.



The next marker of maturity is the form of response, i.e. whether water and water-related aspects of business are managed through formal structures rather than ad hoc responses. This subsection explores the strategic side of water management: whether companies have water strategies, what kinds of targets they use and how far investment plans are beginning to follow the risks and dependencies identified earlier.

THE BUSINESS VALUE OF WATER STEWARDSHIP

Water stewardship takes a broader view of how a company depends on and affects water, and goes beyond improving water efficiency at individual sites. It helps companies manage water-related risks across the geographic areas and value chains they depend on, recognising that business continuity also relies on healthy water systems, resilient suppliers and other water users. This shifts the focus from simply using less water to understanding and managing the wider conditions that can affect operations, supply chains and long-term business resilience, such as the health of the wider watersheds and the integrity of water systems relevant for them and for other water users they share them with.

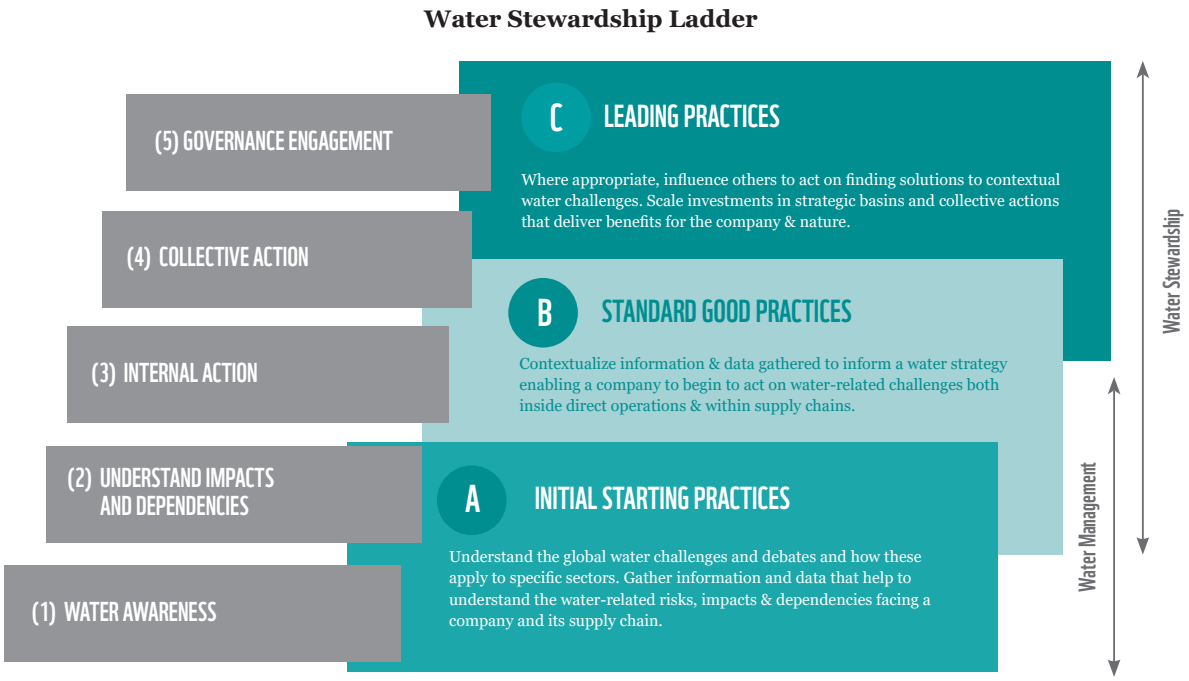


Figure 9: Water stewardship ladder, describing the non-linear, continuous improvement water maturity journey of entities engaging in water stewardship.

Dedicated water strategies are still more the exception than the norm. Figure 10 shows that 53% of respondents do not have a water strategy, while 21% have a strategy covering own operations only. Broader approaches remain rare: 5% report a strategy that partially covers the supply chain, 1% have a strategy that systematically covers the supply chain, and 4% go beyond operations and supply chains to include benefits for nature and local communities. This suggests that many companies have not yet translated awareness of water risk or impact into a structured management approach, especially beyond the company boundary.

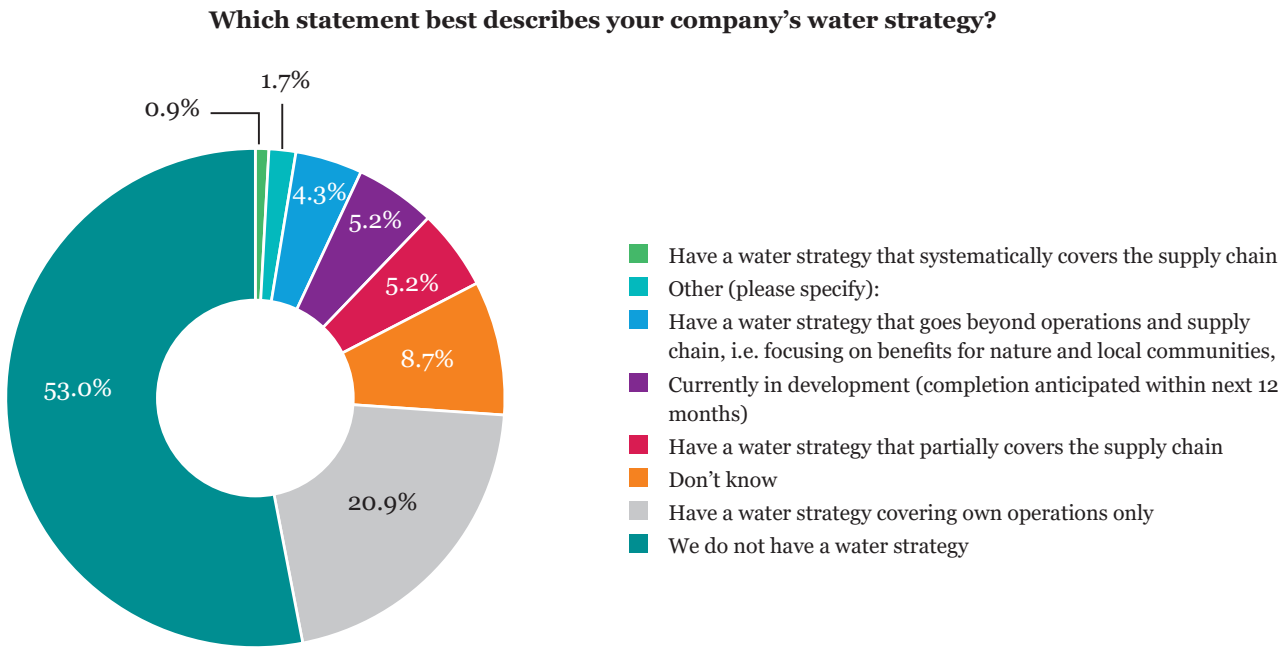


Figure 10: Types of water strategies adopted by the companies.

Figure 11 shows that water quantity, efficiency or intensity is by far the most common focus for corporate water targets, selected by 47% of respondents, followed by water quality at 24%. At the same time, 34% report having no water-related targets. More strategic approaches remain much less common: 14% have targets related to risk and resilience, 11% use context-based targets and just 3% have supply-chain water targets. This suggests that where targets exist, they remain largely focused on companies' own water performance rather than the wider water risks and conditions on which their businesses depend.

Targets help turn a water strategy into day-to-day management. They show what companies choose to measure, improve and be accountable for. In the survey, target setting follows the same maturity pattern as strategy: those companies that have defined water-related targets most often focus on water quantity, efficiency or intensity, followed by water quality. These are useful starting points for improving internal performance. **However, a target is stronger when it is contextual, meaning it responds to the local water challenges a company faces** — for example, scarcity in a stressed basin, poor water quality in a polluted catchment or flood exposure in vulnerable locations, or any local complex combination of challenges.

WHY CONTEXT MATTERS FOR WATER TARGETS

Contextual water targets are shaped by local water conditions, such as scarcity, pollution, flood exposure or the needs of other water users in the same basin. A general efficiency target can be useful, but it may not address the water challenge that matters most in a specific location.

- **Non-contextual targets** focus on internal improvements or corporate ambition without directly reflecting local basin conditions.
- **Contextual targets** are informed by catchment or basin conditions and help focus resources on the right water challenges in the right places.
- **Science-based targets** align company action with what hydrological science indicates is needed to support sustainable freshwater quantity and quality in the relevant basin.

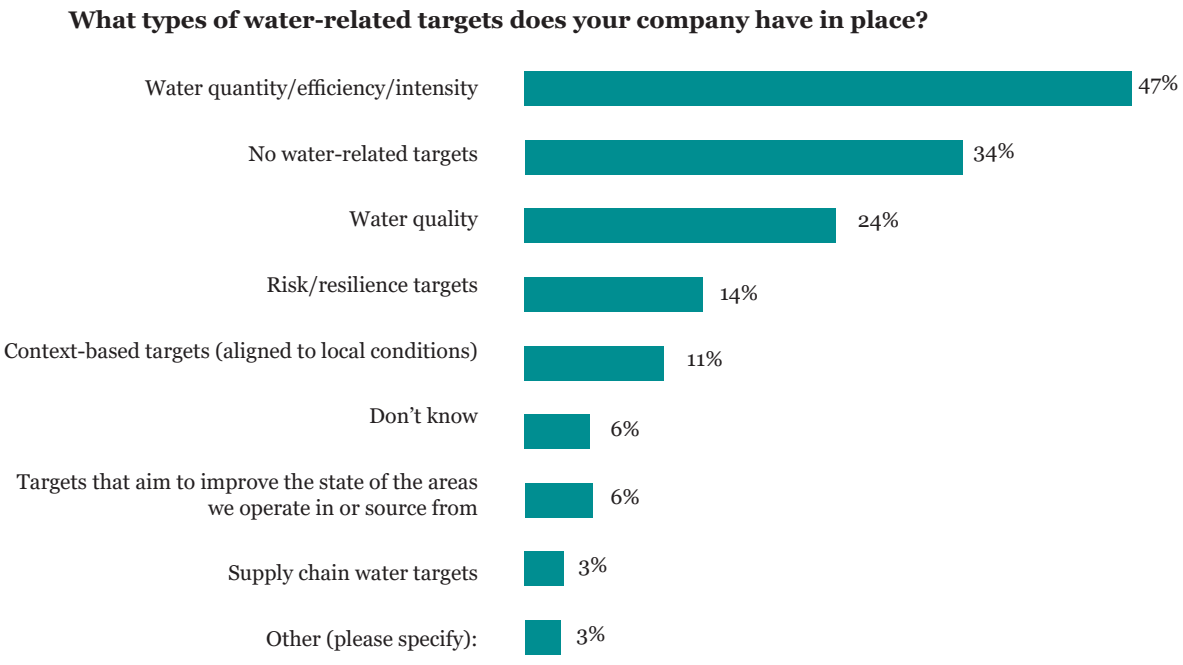


Figure 11: Types of water-related targets employed by companies.

Targets are only meaningful if backed by resources and followed by implementation. Figure 12 suggests that this translation from ambition to funding is still limited. Nearly half of respondents expect water-related investment to remain unchanged over the next three years, while 24% expect an increase and only 4% expect a significant increase. A further 20% do not know how investment will change. This indicates that many investment decisions may still depend on clearer risk signals, regulatory developments or stronger internal business cases.

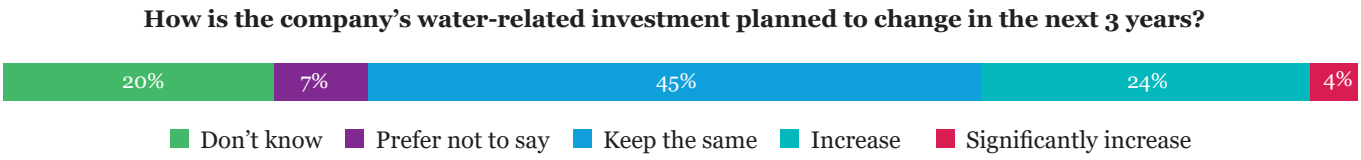


Figure 12: Anticipated change in the planned corporate water-related investments in the next 3 years.

The drivers behind planned investment provide some indication of what could prompt further action. **Investment appears most likely when water risk becomes operationally concrete.** Figure 13 shows that the strongest driver is insufficient water availability for operations, selected by 52% of respondents, followed by increased exposure to nature-related risks in areas of operation, relevant for 46%. Water-related incidents (28%), increased costs (26%), and high supply-chain risk exposure (23%) provide further potential triggers. Regulatory change (23%) and access to incentives, funding or subsidies (20%) may also help encourage investment. Overall, the pattern suggests that the case for investment becomes strongest when water-related risks are tangible and closely connected to business operations and performance.

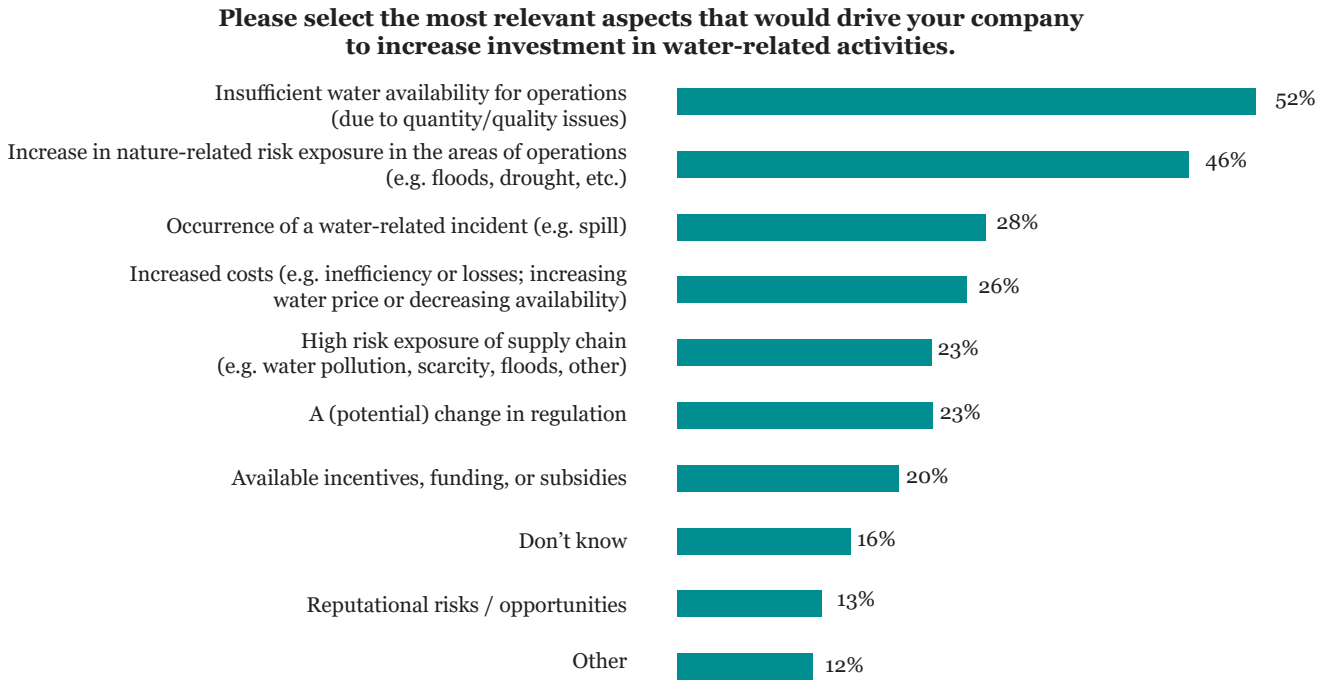


Figure 13: Most relevant drivers for companies to increase investment in water-related activities, ordered by relevance based on frequency of selection.



At Gârla Mare-Vrata in Romania, more than 400 hectares of Danube floodplain have been restored by reconnecting wetlands with the river. The restoration brings back vital habitats, increases water storage and contributes to flood risk reduction, while creating new opportunities for local communities and ecotourism.

Taken together, the strategy, target and investment findings show that many companies are still translating water awareness into structured action. Dedicated water strategies remain limited and often focus on own operations. Targets are strongest around internal efficiency and water quality, while contextual, resilience and supply-chain targets remain less common. Investment intentions follow the same maturity pattern: most respondents do not yet plan major increases, and additional spending appears most likely when water risks become directly linked to continuity, costs or exposure. The practical implication is that water strategies, targets and investment need to be more closely connected to local water challenges, value-chain dependencies and long-term resilience needs.

A reactive investment logic can be understandable when companies face competing priorities and uncertain market conditions. The risk is that waiting for acute pressure, rising costs or concrete incidents can leave fewer response options, higher implementation costs and less time to build resilience. This underlines the importance of using early risk signals, local water context and value-chain exposure assessments to guide investment before pressure becomes acute.

BUSINESS WATER MATURITY IN CENTRAL AND EASTERN EUROPE

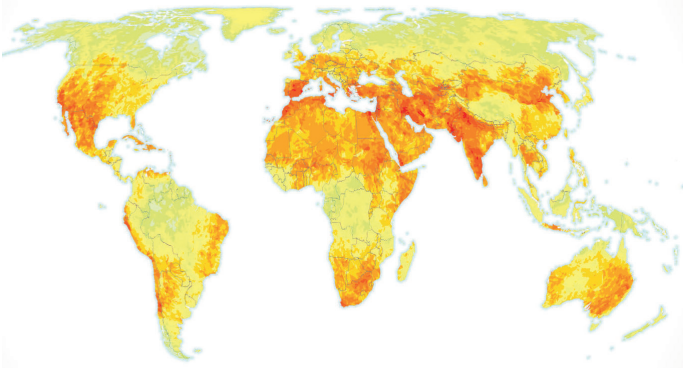
Taken together, the findings reveal a picture of uneven business water maturity. Companies are not standing still: many recognise water-related risks and are taking action. But progress is inconsistent, with assessment, preparedness, targets and investment often less developed than awareness of the risks themselves.

FROM VISIBILITY TO STRUCTURED ACTION

Water risk becomes most visible when dependency, past experienced impacts or structured assessment make it tangible.
Past experience appears to shape how companies perceive future water risk.

Figure 14 shows that 81% of respondents who have experienced negative water-related effects in the past five years expect moderate or significant impacts over the next five years, compared with 43% of those that have not. The difference is even more pronounced for significant impacts: 25% of companies with past negative experience expect significant future impacts, compared with just 7% of those without such experience.

In other words, water risk appears more tangible to companies once they have experienced its consequences firsthand.



Screenshot from WWF Water Risk Filter Explore riskfilter.org

Past experience also shapes expectations: 81% of companies with past negative effects expect moderate or significant future business impacts, compared with 43% among those with no past negative effect experienced.

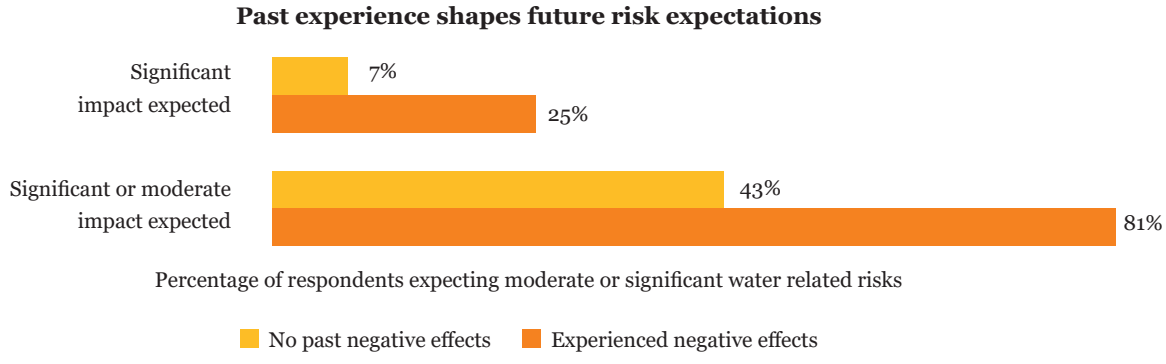


Figure 14: Percentage of respondents expecting moderate or significant water-related risks in the next five years, based on whether they experienced negative water-related effects in the past five years.

Figure 15 shows that structured risk evaluation creates this visibility earlier and supports preparedness: 68% of companies that have evaluated water-related risks in their own operations consider themselves very or moderately prepared for handling future water-related challenges, compared with 39% among companies without such evaluation.

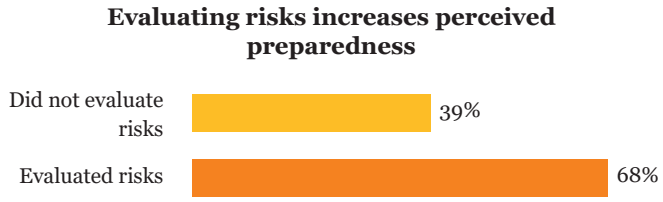


Figure 15: Percentage of companies that feel very or moderately prepared for future water challenges based on whether they have or have not evaluated their water-related risks.

Dependency shows where to look, but not yet how ready a company is. As we have already established, water dependency is most visible in own operations and upstream supply chains, where disruption can directly affect production, sourcing and continuity. However, dependency is neutral until it intersects with scarcity, poor water quality, flooding, regulatory constraints or weak preparedness. The practical implication is to treat dependency mapping as the starting point: once dependency is visible, companies should test where it overlaps with stressed basins, vulnerable suppliers, exposed sites or weak preparedness, and prioritise action there.

The investment gap appears when water risk feels relevant, but not yet urgent enough to move budgets. Recognising water-related risk does not necessarily lead to investment. In some cases, that may be justified because risks are limited or already well managed. More concerning are cases where material risks are recognised but have yet to attract funding or action. The challenge is to translate those risks into a clear business case, with defined priorities and investment before the costs of inaction rise.

Strategy is more common where water dependency is higher, but it should not wait until risk becomes acute. Companies reporting higher water dependency are more likely to have a water strategy, suggesting that formal management often follows visible business relevance. Notably, 73% of companies reporting critical water dependency have a water strategy, compared with only 18% of companies reporting low dependency. The opportunity is to bring strategy development forward by using dependency mapping, basin screening and supplier exposure assessment before risks become harder or more costly to manage.

PREPAREDNESS BECOMES CREDIBLE WHEN TARGETS TURN INTO IMPLEMENTATION

Preparedness becomes meaningful when it is reflected in concrete practices, especially targets and activities beyond own operations. The survey results suggest that the most prepared companies are not only setting water-related targets but also extending action beyond direct operations towards suppliers, sourcing regions or shared water systems.

Figure 16 shows this connection clearly: 67% of companies that consider themselves very prepared have both water-related targets and activities beyond own operations, compared with only 11% of unprepared companies.

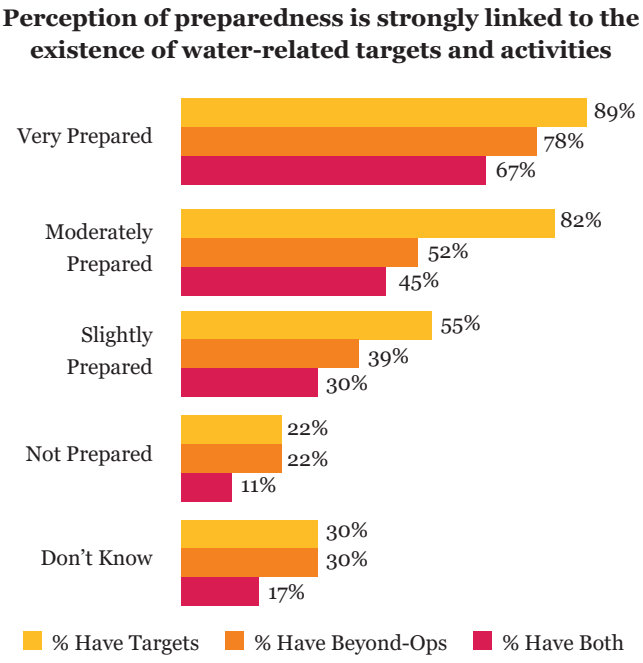


Figure 16: Share of companies with water-related targets and activities related to water going beyond their own operations, by level of preparedness.

Among very prepared companies, nearly 90% have water-related targets and more than three-quarters have implemented activities beyond direct operations.

The moderate preparedness group is the main acceleration opportunity: 82% have water-related targets, but only 52% have implemented activities beyond own operations. The priority is to turn ambition into implementation across suppliers, sourcing regions and shared water systems.

Strategy is the bridge between experienced impacts and funded action. Experiencing water-related impacts can make risk visible, but experience alone does not consistently lead to investment. The strongest pattern appears where impact experience is combined with a formal water strategy.

As depicted in Figure 17, among organisations with past water-related impacts, the presence of a strategy doubles the likelihood of future investment, from 26% to 52%, helping translate urgency into priorities, ownership and resource allocation.

Strategy should not be seen only as a policy document. Its value lies in identifying where investment is needed, clarifying responsibilities and giving water risk a stronger position in budgeting and resilience planning.

Existence of strategy is the strongest investment driver

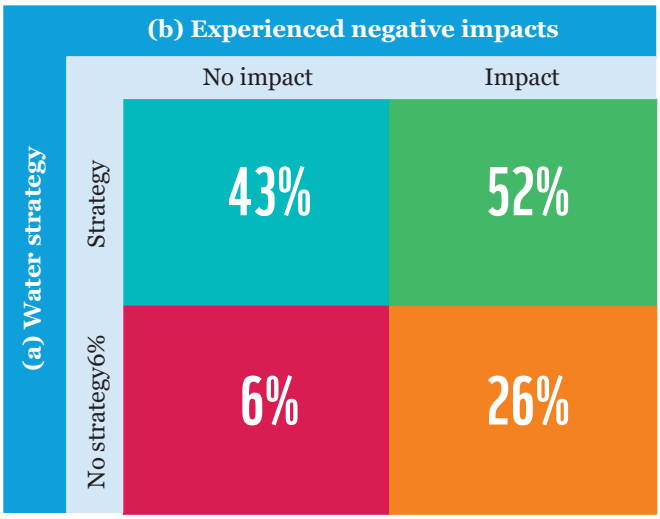


Figure 17: Percentage of companies that will increase their water-related investments based on (a) whether or not the company has any water strategy and (b) whether or not the company has experienced negative water-related impacts in the last five years.





Vojčianske River branch in Slovakia, a vital part of the Danube's inland delta system before and after restoration, excavating 900 metres of new riverbed, and bringing water back to the landscape.

THE MATURITY GAP REFLECTS UNEVEN PROGRESS, NOT INACTIVITY

Across risk awareness, strategy, target setting, implementation and investment, most companies are still developing their water management approach. While 76% of responding companies identify future water-related risks, only 47% have a strategy in place — showing that awareness has outpaced structured action. The pattern is uneven maturity: many organisations have made progress in one or two areas without connecting the pieces of their action into a coherent approach.

Only a small minority of responding companies demonstrate consistently high maturity across all analysed dimensions, while a substantial share remain at an emerging stage with limited awareness, strategic engagement and implementation.

The greatest opportunity for acceleration lies between these extremes. Many companies have already made progress through assessments, strategies or targets, but these foundations are not yet consistently supported by investment or broader implementation.

INVESTING IN NATURE: RESTORATION AND NATURE-BASED SOLUTIONS

Restoring wetlands, rivers, floodplains, floodplain forests and side channels can reduce flood and drought risks, improve water quality, support biodiversity and strengthen resilience. Nature-based solutions are especially relevant for companies whose water risks depend on conditions across the wider river basin, not just on water use at their own sites. In the EU, every €1 invested in nature restoration is estimated to generate €4–€38 in benefits (27).

Water maturity does not advance evenly. A company may have targets but limited investment, recognise water-related risks but have yet to act on them, or have a strategy that does not yet consider suppliers and priority basins. The main opportunity is to close these gaps according to maturity level: early-stage companies need awareness and responsibilities; intermediate companies need funded implementation; advanced companies need value-chain and collective stewardship action.

RESULTS AT THE COUNTRY AND SECTOR LEVELS SHOW DIFFERENT MATURITY STAGES, NOT SEPARATE STORIES

Country-level results differ, but the overall picture remains coherent: across all surveyed markets, companies still face gaps in strategy adoption, preparedness and investment. Water stewardship is therefore a shared maturity challenge across the region. Participating companies across Slovakia and Czechia show comparatively stronger signals: in both countries, more than half of respondents feel moderately or very prepared. Those from Slovakia report the highest investment intentions, while Czechia-based companies show the strongest uptake of water-related targets.

Ukraine-based respondents show lower results across strategy adoption, target setting, investment intentions and preparedness, suggesting an earlier stage of the water management journey as a likely pattern for companies in this country. This, on the one hand, might indicate a different type of challenge, as Ukraine has been facing significant disruptions due to the ongoing war since 2022, and on the other hand, a different starting point along the same pathway from awareness and basic management practices towards implementation, investment and broader resilience-building.

Table 2 compares the respondent groups from each country across four relevant water management aspects: strategy adoption, target setting, planned investment and preparedness.

Table 2: Water strategy adoption, target setting, investment intentions and preparedness by country.

RESPONDENT GROUP	COMPANIES WITH WATER STRATEGY (%)	COMPANIES WITH WATER TARGETS (%)	COMPANIES PLANNING WATER INVESTMENTS (%)	COMPANIES MODERATELY OR HIGHLY PREPARED (%)
ROMANIA	47%	67%	30%	50%
BULGARIA	43%	61%	25%	46%
CZECHIA	47%	71%	29%	53%
UKRAINE	38%	54%	23%	38%
HUNGARY	45%	64%	27%	45%
SLOVAKIA	44%	67%	33%	56%

Sector-level analysis of the results reveals that higher exposure does not always correspond to stronger response. Naturally, water exposure is highest among companies in sectors that depend directly on freshwater availability and quality or on water-intensive processes. More revealing, however, is that higher exposure does not necessarily correspond to stronger strategies, preparedness or investment. The sector-level analysis therefore helps identify where business responses are proportionate to water-related risks, and where important gaps remain.

The highest exposure is found among companies in **Metals & Mining and Agri- & Food Production,** where 83% and 76% respectively report high water dependency. Those from the Agri- & Food are particularly notable, with **71% reporting having experienced negative water-related impacts,** indicating that water challenges are already a present business reality.

Responding companies from the Energy sector stand out for better translating exposure into investment. The sector has high exposure and high reported impacts experienced, and respondents also exhibit the strongest investment response, with 43% planning increased water-related investment.

WATER EXPOSURE AND RESPONSE INDEX

The Water Exposure and Response Index provides a composite measure of corporate preparedness for water-related risks by combining four equally weighted indicators: high water exposure, experienced negative impacts, the presence of a water strategy, and plans to increase water-related investment. By integrating these dimensions, the Index assesses how companies understand their water dependency and exposure, translate awareness into strategies and targets and commit resources to addressing water-related risks and opportunities. The resulting score reflects both companies' exposure to water-related challenges and the extent of their strategic and investment response (see more information on the index methodology in the annex section).



Table 3 compares companies' exposure, experienced impacts and maturity indicators by sector to show where exposure is matched by action — and where gaps remain.

Table 3: Companies' responses related to water exposure, impacts, and strategy and investments by sector.

RESPONDENT GROUP	HIGH WATER EXPOSURE	EXPERIENCED WATER IMPACTS	STRATEGY ADOPTION	PLANNED INVESTMENT INCREASE	WATER EXPOSURE AND RESPONSE
OTHER – HIGH IMPACT (Table A1)	67%	61%	50%	33%	●●●○○
AGRI- & FOOD PRODUCTION	76%	71%	53%	35%	●●●●○
CONSTRUCTION	50%	50%	40%	20%	●●○○○
ENERGY	71%	57%	57%	43%	●●●●○
MANUFACTURING	57%	43%	43%	29%	●●●○○
METALS AND MINING	83%	67%	50%	33%	●●●●○

For Finance and Commercial & Professional Services, the index needs a different interpretation. While direct operational dependency on water may be relatively low, these companies can have significant influence through capital allocation, procurement, due diligence, advisory services, client work and investment portfolios. For these sectors, readiness is less about reducing own water use and more about integrating water-related risks and opportunities into decisions and services, making them important enablers of wider water stewardship.

Table 4: Companies' responses related to water exposure, impacts, strategy and investments by sector (Finance, Commercial & professional services).

RESPONDENT GROUP	HIGH WATER EXPOSURE	EXPERIENCED WATER IMPACTS	STRATEGY ADOPTION	PLANNED INVESTMENT INCREASE	WATER EXPOSURE AND RESPONSE
FINANCE	33%	33%	44%	22%	●●○○○
COMMERCIAL & PROFESSIONAL SERVICES	38%	38%	38%	25%	●●○○○

SUMMARY OF RESULTS ANALYSIS

Based on the insights from the survey, water resilience is emerging as a business necessity in Central and Eastern Europe, but many companies are not yet managing water with the same structure as other strategic risks. Climate volatility, degraded freshwater ecosystems, stronger regulation, value-chain exposure, better water data and emerging investment needs all point in the same direction: water can no longer be treated as a narrow environmental or compliance topic. For many responding companies, the main challenge is the **water action gap**: recognition of water-related risks is growing, but action in the form of assessment, increased preparedness, adoption of strategies, targets and investment remains uneven.

This gap matters because water risks rarely remain isolated within one site. Risk exposure can arise through suppliers, shared infrastructure, logistics routes, local communities, regulation or the wider river basin. The most material risks may therefore sit outside the areas that are easiest to measure and control.

BUILDING A WATER-RESILIENT BUSINESS

FROM RISK AWARENESS TO STRUCTURED ACTION

The survey findings show that companies tend to be most advanced where water is closest to their direct operations. Own operations are more frequently assessed, managed and covered by strategies than supply chains or wider value-chain activities. This is understandable: operational water use is closer to existing management systems, site teams, permits and cost controls. However, upstream supply chains can also be a major area of dependency and disruption, particularly for companies whose products, inputs or commodities depend on water-intensive activities outside their own sites.

This creates a structural blind spot. Many companies can identify and manage water risks where they have direct control, but may not yet understand whether critical suppliers, raw materials, logistics links or sourcing regions are exposed to scarcity, flooding, pollution or regulatory pressure in their respective locations. **The water action gap is therefore not simply a lack of awareness; it is the distance between recognising water as relevant and embedding it into decisions across the business and value chain.**

Experience makes water risk tangible, but it is a costly trigger for action to wait for. Companies that have already faced negative water-related effects are more likely to expect future impacts and to see water as business-relevant. Yet waiting for disruption can leave fewer response options, increased expenses and less time to build preparedness.

The conclusion is clear: companies need to create visibility before impacts become acute, using assessment, scenario thinking and value-chain screening to anticipate where water could affect continuity, costs, permits, suppliers or trust.

Differences by country and sector of activity add nuance, but do not change the overall story. They point to different maturity stages and different exposure pathways, not separate conclusions. Respondents from some countries show stronger preparedness, target-setting or investment signals, while respondents from others appear earlier in building basic management structures. Across sectors, respondents from water-intensive industries report higher exposure and more frequent impacts, but higher exposure does not automatically translate into stronger strategy, preparedness or investment.

Water maturity is shaped by exposure, but also by governance, data availability and quality, management attention and the strength of the business case for action. The practical conclusion is to move from broad recognition to prioritisation: identify where water could materially affect business continuity, costs, permits, supply reliability, customer delivery or stakeholder trust, and connect those priorities to assessment, ownership, targets and investment.





Katalin Sipos, former CEO of WWF-Hungary, delivering a keynote at The Business Case for Water conference, Budapest, 2024.

PRACTICAL ACTIONS TO BUILD WATER RESILIENCE

The following actions translate the water action gap into a practical agenda. They are not a one-size-fits-all roadmap, but a structured set of steps companies can adapt based on sector, geography, dependency level and maturity.

1. Build awareness. Understand where the business is exposed and has its biggest dependencies and impacts

Companies should begin by mapping where and how they depend on water across own operations and the value chain. This means establishing a reliable view of water-related data and identifying priority sites, key suppliers, critical production processes, logistics dependencies and customer-facing activities that may be exposed to water scarcity, flooding, poor water quality or regulatory constraints. The objective is to make water dependency and potential impact visible in business terms: which sites, products, revenues, costs or permits could be affected if water conditions deteriorate, and, conversely, which of these can be a lever to decrease impacts.

> **Tools and resources:**
>
> WWF Water Risk Filter and WRI Aqueduct can support initial screening of operational and basin-level water risks, helping identify priority sites, suppliers and regions for deeper assessment.

2. Prioritise risks using local water context

Water-related risks are highly location-specific. Companies should therefore avoid relying only on consolidated water use figures and instead assess exposure at site and catchment or basin level depending on scale. A production site with moderate water consumption may still face material risk if it is located in an area of high or very high water stress, affected by poor water availability or quality, or dependent on vulnerable infrastructure. Prioritisation should combine internal dependency data with external information on basin stress, future climate scenario models, regulatory trends and stakeholder concerns.

> **Tools and resources:**
>
> WRI Aqueduct and WWF Water Risk Filter and basin-level datasets can help compare site and supplier exposure to water stress, drought, flood, depletion, water quality and future risk scenarios.

3. Plan and consolidate. Integrate water into governance and risk management

Water resilience should be embedded in existing governance structures rather than treated as a standalone sustainability topic. Clear ownership is needed across sustainability, product development, operations, procurement, logistics, risk, finance and site management functions. Material water risks should be reflected in enterprise risk management, investment planning, business continuity planning and, where relevant, sustainability reporting. This helps ensure that water-related issues are considered before they become operational constraints, compliance issues or unplanned costs.

> **Tools and resources:**
>
> The Water Stewardship Standard of the Alliance for Water Stewardship can support governance, accountability and credible management systems for responsible site-level and catchment-based water stewardship.

4. Strengthen site-level preparedness and operational efficiency

At the operational level, companies should improve collection and monitoring of water data, reduce water use, increase resource efficiency, and minimise emissions released to water, while maintaining critical water infrastructure and preparing for disruption scenarios. This includes drought and flood response plans, alternative supply options, wastewater treatment resilience, emergency storage, and clear escalation procedures. For high-dependency sites, water should be treated similarly to other critical utilities: monitored, stress-tested and included in continuity planning.

Tools and resources:

The Water Stewardship Standard by the Alliance for Water Stewardship and site-level water KPIs can support operational preparedness, water monitoring, response planning and continuous improvement.

5. Cooperate. Engage suppliers and partners for collective action

For many companies, the most material water exposure sits outside direct operations. Procurement and supply-chain teams should identify suppliers, commodities and regions with high water dependency or exposure to water stress, flooding, poor water quality or regulatory pressure. Engagement should move beyond generic questionnaires and focus on practical improvements, such as supplier risk screening, minimum water management expectations, efficiency or treatment upgrades and collective action in priority basins. Because water risks are shared, collaboration with relevant public authorities, NGOs, utility providers, local communities, sector peers and other significant water users is often necessary to address basin-level pressures, strengthen governance, improve infrastructure planning, restore catchments and build long-term resilience.

Tools and resources:

WWF Water Risk Filter can support supplier screening, while the CEO Water Mandate Water Action Hub can help identify basin-level initiatives and potential partners for collective action.

6. Set targets that reflect local conditions

Water targets should be meaningful in the context in which the company operates. A uniform reduction target may be useful for internal efficiency, but it does not necessarily address the most material water challenges affecting the company's own operations or direct suppliers. In water-scarce basins, the priority may be reducing withdrawals or increasing reuse. In polluted basins, the priority may be to focus on discharge quality targets. In flood-prone areas, resilience planning and nature-based solutions may be more relevant. Companies should therefore move towards contextual targets that respond to local basin conditions where their operations and direct suppliers are exposed, rather than applying the same target across all locations.

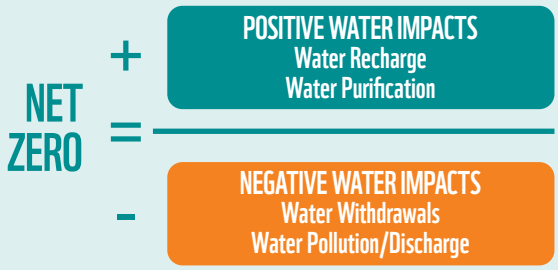
Tools and resources:

SBTN freshwater guidance and WWF contextual water targets guidance can help companies translate local basin conditions into meaningful freshwater targets.

NET POSITIVE WATER AND REPLENISHMENT

The idea behind **net positive water** is that companies reduce negative impacts and contribute to positive outcomes in the basins where they operate or source from. Site-level actions such as reducing withdrawals, improving efficiency, reusing water and strengthening wastewater treatment are important starting points, but companies may also need to support basin-level action beyond their own facilities.

The concept is easy to communicate — doing more good than harm — but **water differs from carbon**. Its impacts depend on location, timing, quantity, quality and basin condition. Net positive water or replenishment commitments are therefore most useful when linked to local water challenges, company dependencies and impacts, and the needs of other water users and ecosystems. Used only as a single volume-based metric, they risk oversimplifying the issues they are meant to address.



7. Monitor progress and adapt over time

Water resilience is not a one-off assessment. Companies should establish indicators to monitor dependency, risk exposure, impact on ecosystems, water resources and communities, mitigation progress and residual vulnerability. Relevant indicators may include water withdrawal and discharge quality, the share of sites in high-risk basins, supplier exposure, the number of priority sites with response plans, investment needs and progress against contextual targets. These indicators should be reviewed regularly as climate conditions, regulations, business footprints and stakeholder expectations evolve. In regions where water risks are emerging, but not yet acute, continuous monitoring helps companies identify and address risks before they become material.

> **Tools and resources:**
>
> The Alliance for Water Stewardship Standard, SBTN freshwater guidance and company-specific KPIs can support monitoring of water use, discharge quality, supplier exposure, response plans, contextual targets and residual risk.

Together, these actions move water management from reactive issue handling to resilience building. Companies do not need a perfect strategy to begin; they need a clear view of where water could materially affect continuity, costs, compliance, supply reliability or growth, and a structured way to manage those priorities. Those that connect water to site planning, procurement, supplier engagement, capital expenditure, business continuity and collective action will be better positioned to protect operations, maintain stakeholder confidence and invest with greater certainty as water conditions become less predictable.



*Liberty Island on the Danube River in Hungary **before** a restoration project by WWF and partners*



*Liberty Island on the Danube River in Hungary **after** a restoration project by WWF and partners*

APPENDIX

SURVEY METHODOLOGY

The analysis presented in this report is based on a structured online survey of companies. The survey was designed and conducted by EY and commissioned by WWF, to assess corporate exposure to water-related risks and dependencies, as well as the maturity of water management practices.

Data were collected through a standardised questionnaire distributed to companies across six CEE countries and selected sectors deemed relevant to freshwater stewardship. The survey targeted organisations of different sizes and business models and followed a value chain-oriented logic, capturing water dependencies and impacts across own operations and along the supply chain, including upstream and downstream activities.

The questionnaire covers key areas including freshwater dependency, historical water-related impacts experienced, forward-looking risk exposure, preparedness levels, existing strategies and targets, as well as planned investments and key drivers for action. Responses were cleaned and validated, and incomplete entries were excluded. The data was aggregated and analysed across sectors, company sizes, and geographies.

The analysis is primarily descriptive and focuses on identifying patterns, trends, and gaps. It assesses corporate water dependency and risk exposure, evaluates the maturity of water management approaches, and compares perceived risks with the level of preparedness. In addition, the survey identifies key drivers for action and future investment priorities.

As the analysis is based on self-reported data, results should be interpreted as indicative. Nonetheless, the methodology provides a consistent basis for understanding corporate exposure, maturity, and priorities related to water management.

RESPONDENT PROFILE

The respondent group reflects a cross-section of companies operating across Bulgaria, Romania, Czechia, Slovakia, Hungary and Ukraine. Respondents represent companies from a range of sectors with different levels of exposure to water-related risks, including water-intensive industries, sectors with significant value chain dependencies, and companies whose influence is primarily linked to financing, procurement, operations or customer expectations.

The survey intentionally includes both companies with direct operational water dependency and companies whose exposure is more indirect. This allows the analysis to capture a broader view of how water is currently understood as a business issue: from production continuity, site-level risk and regulatory compliance to supply chain resilience, reputational expectations and future investment planning.

Given the indicative nature of the survey, results should be interpreted as a pulse of current business awareness and management maturity rather than a statistically representative market assessment. The respondent profile nevertheless provides a useful basis for identifying common patterns, sector-specific differences and potential gaps between perceived water relevance and the level of structured action in place.

INDUSTRY LENS USED IN THE ANALYSIS

Table A1: Classification of high-impact and high-influence industries.

CATEGORY	INDUSTRY
HIGH IMPACT	Agri- & Food Production and Traders
	Energy
	Fishing and Aquaculture
	Transportation
	Forest and Paper
	Construction
	Metals and Mining
	Manufacturing of Other Products
	Commercial & Professional Services
	Other – High Impact
HIGH INFLUENCE	Finance
	Hospitality and Leisure
	Technology, Media and Telecom
	Consumer Goods and Retail
	Apparel and Textile
	Other – High Influence

This classification is used strictly as a reading aid, not as a definitive ranking of sector risk. Actual exposure depends on each company's locations, operations, suppliers, products and the river basins in which it operates.

COUNTRY AND SECTOR BREAKDOWNS

The following tables provide the breakdown of valid survey respondents by country and respondent profile. They are intended to support interpretation of the survey results by showing the geographic and sectoral composition of the response base.

Romania and Bulgaria account for the largest share of responses, together representing just over half of the valid respondent base. The remaining responses are distributed across Czechia, Ukraine, Hungary and Slovakia.

Table A2: Distribution of valid respondents by country.

COUNTRY	COUNT	% OF VALID RESPONDENTS
ROMANIA	33	28.7%
BULGARIA	29	25.2%
CZECHIA	17	14.8%
UKRAINE	14	12.2%
HUNGARY	11	9.6%
SLOVAKIA	11	9.6%
TOTAL	**115**	**100.0%**

Table A3: Distribution of valid respondents by respondent profile.

RESPONDENT PROFILE	COUNT	% OF VALID RESPONDENTS
Agri- & Food Production and Traders	19	16.5%
Construction	11	9.6%
Finance	10	8.7%
Commercial & Professional Services	8	7.0%
Energy	8	7.0%
Manufacturing of Other Products	8	7.0%
Metals and Mining	6	5.2%
Other - High Impact	18	15.7%
Technology, Media and Telecom	6	5.2%
Apparel and Textile	5	4.3%
Transportation	5	4.3%
Consumer Goods and Retail	3	2.6%
Hospitality and Leisure	2	1.7%
Other - High Influence	6	5.2%
Total	**115**	**100.0%**

The respondent profile covers both high-impact sectors, where water is more directly linked to operations and production, and high-influence sectors, where exposure may arise through financing, procurement, customer relationships or value chain dependencies. This mix supports a broader view of how water-related risks are perceived across different business models.

WATER EXPOSURE AND RESPONSE INDEX METHODOLOGY:

The Water Exposure and Response Index summarizes four dimensions: water exposure, experienced water-related impacts, adoption of a water strategy, and intention to increase water-related investment. Each dimension receives an equal weight of 25%. The resulting composite score is therefore the arithmetic mean of the four sector-level percentages.

To translate this percentage into an accessible five-point rating, the composite score is scaled against an 80% benchmark and rounded to the nearest whole grade. A composite score of 80% represents an unrounded rating of 5.0. Due to rounding, the final rating bands are:

- 0/5: below 8%
- 1/5: 8% to below 24%
- 2/5: 24% to below 40%
- 3/5: 40% to below 56%
- 4/5: 56% to below 72%
- 5/5: 72% or above

The calculation can be expressed as:

Composite Score = (Exposure + Impacts + Strategy + Investment) ÷ 4

Rating = (Composite Score ÷ 80% × 5)

INTERNATIONAL CONTEXT

The Shaping the Future Water Agenda is a joint GlobeScan and WWF program initiated in the summer of 2024 to develop insights and guidance that help companies and partners strengthen approaches to corporate water stewardship, advance collective action on shared global and local water challenges and strengthen water-related engagement with stakeholders. The research incorporated insights from a global consultation of over 350 expert stakeholders, a survey of more than 30,000 individuals across 30 countries, and engagement with 20 leading global companies that have supported this initiative.

Learn more about the research program's two reports:

- The Future Water Agenda: How water can lead the way for sustainability and collective action (2025)
- Transforming Collective Action for Shared Water Challenges (2026)




© magnific

REFERENCES

1. WWF (2023): *High Cost of Cheap Water: The True Value of Water and Freshwater Ecosystems to People and Planet*. Available at: https://www.worldwildlife.org/publications/high-cost-of-cheap-water-the-true-value-of-water-and-freshwater-ecosystems-to-people-and-planet/

2. European Environment Agency (EEA) (2024): *Europe's State of Water 2024: The Need for Improved Water Resilience*. EEA Report 07/2024. Available at: https://www.eea.europa.eu/en/analysis/publications/europes-state-of-water-2024

3. International Commission for the Protection of the Danube River (ICPDR) (n.d.): *The Danube River Basin: Facts and Figures*. Available at: https://www.icpdr.org/sites/default/files/nodes/documents/icpdr_facts_figures.pdf

4. WWF Central and Eastern Europe (2021): *Restoring Rivers and Wetlands at Scale: Results and Lessons from the Cross-Sector Living Danube Partnership*. Available at: https://wwfcee.org/uploads/partnerships/LDP/WWF_CEE_LDP_Full_Report_210713_w.pdf

5. IPCC (2022): Climate Change 2022: *Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Available at: https://www.ipcc.ch/report/ar6/wg2/

6. European Environment Agency (EEA) (2025): *Climate Preparedness 2025: Extreme Weather in a Changing Climate – Is Europe Prepared?* Available at: https://discomap.eea.europa.eu/ClimatePreparedness2025/

7. European Environment Agency (EEA) (n.d.): *Climate Change Impacts in Europe – The European Overview*. Available at: https://discomap.eea.europa.eu/climate/?page=The-European-overview

8. Copernicus Climate Change Service (C3S) (2023): *European State of the Climate 2022:* Drought. Available at: https://climate.copernicus.eu/esotc/2022/drought

9. World Economic Forum (2024): *The Global Risks Report 2024*. Available at: https://www.weforum.org/publications/global-risks-report-2024/

10. Copernicus Climate Change Service (C3S) and World Meteorological Organization (WMO) (2025): *European State of the Climate 2024*. Available at: https://climate.copernicus.eu/esotc/2024

11. European Commission (2025): *European Water Resilience Strategy*. Available at: https://environment.ec.europa.eu/topics/water/water-resilience-strategy_en

12. CDP (2024): Water Now a Major Risk for World's Supply Chains. Available at: https://www.cdp.net/en/articles/media/water-now-a-major-risk-for-worlds-supply-chains

13. World Resources Institute (WRI) (n.d.): *Aqueduct Water Risk Atlas*. Available at: https://www.wri.org/aqueduct

14. WWF (n.d.): *Water Risk Filter*. Available at: https://waterriskfilter.org/

15. Alliance for Water Stewardship (AWS) (2026): *International Water Stewardship Standard, Version 3.0*. Available at: https://a4ws.org/wp-content/uploads/2026/03/AWS_Standard-3.0_2026-_English.pdf

16. Science Based Targets Network (SBTN) (2024): *Freshwater Guidance*. Available at: https://sciencebasedtargetsnetwork.org/resources/guidance/

17. WWF (2021): *Contextual Water Targets: A Practical Guide to Setting Contextual Corporate- and Site-Level Water Targets*. Available at: https://wwfint.awsassets.panda.org/downloads/contextual_water_targets_guide.pdf

18. CEO Water Mandate and Pacific Institute (n.d.): *Water Action Hub*. Available at: https://wateractionhub.org/

19. WWF and GlobeScan (2025): *The Future Water Agenda: How Water Can Lead the Way for Sustainability and Collective Action*. Available at: https://globescan.com/future-water-agenda/

20. Breakbulk News (2022): *Danube Dries to 1996 Low, Choking Grain Exports and River Traffic in Romania*. Available at: https://breakbulk.news/danube-dries-to-1996-low-choking-grain-exports-and-river-traffic-in-romania/

21. ESG News (2021): 1 in 5 Companies Report Supply Chain Water Risks Which Could Have a Significant Impact on Their Business, CDP Report. Available at: https://esgnews.com/1-in-5-companies-report-supply-chain-water-risks-which-could-have-a-

significant-impact-on-their-business-cdp-report/. See also CDP Report: Stewardship at the Source, Driving water action across supply chains. Available at: https://www.cdp.net/api/media/3yc7aKt7h5r-wyJotfaD1Eh?locale=en. Accessed 15 July 2026.

22. France 24 / AFP (2026): *Stranded Boats, Out-of-Work Fishermen as Danube Hits Record Lows*. Available at: https://www.france24.com/en/live-news/20260730-stranded-boats-out-of-work-fishermen-as-danube-hits-record-lows

23. Reuters (2026): *Romania Blasts Rocks to Reroute Cooling Danube Water to Nuclear Reactor*. Available at: https://www.reuters.com/business/energy/hungarys-nuclear-plant-shutdown-due-low-danube-gets-reprieve-until-later-week-2026-08-03/

24. Balkan Insight (2026): Left High and Dry: *Drought Exposes Central Europe's Water Crisis*. Available at: https://balkaninsight.com/2026/07/28/left-high-and-dry-drought-exposes-central-europes-water-crisis/

25. European Drought Observatory / EU Science Hub (2026): *Drought in Europe in Late July 2026*. Available at: https://joint-research-centre.ec.europa.eu/european-and-global-drought-observatories/current-drought-situation-europe_en

26. Hauer, C., Paster, M., Pulg, U. et al. Critical flows at the Wien River during the 1000-years event in September 2024 – causes, consequences and possible management options for urban river flood management. Nat Hazards 121, 11173–11185 (2025). https://doi.org/10.1007/s11069-025-07244-w

27. European Commission: Directorate-General for Environment, IUCN, IEEP, Trinomics and UNEP-WCMC, [Directorate-General for Environment, IUCN, IEEP, Trinomics, UNEP-WCMC], Impact assessment study to support the development of legally binding EU nature restoration targets – Final report, Publications Office of the European Union, 2023, https://data.europa.eu/doi/10.2779/275295



WWF

Working to sustain the natural world for the benefit of people and wildlife.

together possible™ panda.org

WWF-CEE gratefully acknowledges funding support from the LIFE Programme of the European Union.
All views and opinions expressed are solely those of WWF-CEE and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor CINEA can be held responsible for them.