

Water scarcity as a nature-related financial risk

Legal aspects

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Foreword



Olaf Sleijpen
Chair of the NGFS



Chiara Zilioli
Chair of the NGFS Experts' Network on Legal Issues

It is with great pleasure that we present this report on the Legal aspects of water scarcity as a nature-related financial risk.

In July 2024, the NGFS published its Conceptual Framework to guide Action by Central Banks and Supervisors on nature-related financial risks. Notably, it selected the degradation of a freshwater ecosystem – the Colorado River Basin – as a key example. This example demonstrated that water scarcity is, in many respects, the quintessential example of a nature-related financial risk, with profound economic and financial consequences.

As outlined in this report, the economic and financial consequences of water scarcity can also be driven by legal developments. When the NGFS Experts' Network on Legal Issues began preparing this report, it became clear that the legal dimensions of water scarcity are already extensive and rapidly evolving.

First, this report outlines that the fundamental right to water is recognised by international, regional and national law. Recent court rulings on climate are laying the groundwork for more extensive litigation on the right to water, as the climate crisis intensifies, and citizens and civil society seek to have their rights protected.

Second, the report examines the growing body of litigation – including not only rights-based claims but also challenges to authorisations and development plans. Such litigation can drive transition risk by prompting states to adopt more ambitious climate adaptation policies and can also pose direct risk to corporates and financial institutions with a financial interest in challenged projects.

Third, the report also emphasises the central role of water management and pollution prevention legislation. As states develop climate adaptation measures and litigation risk increases, they may strengthen such legislation and its enforcement, creating transition risks for corporates. Meanwhile, calls for regulatory simplification may pull in the opposite direction – leaving states to balance the short- and long-term interests of economic actors and citizens while also trying to provide legal certainty.

The findings of this report also underscore the importance of the climate-nature nexus, especially in view of disruptions to the water cycle caused by the climate crisis. Europe's catastrophic heatwaves in summer 2026 offer sobering examples: low water levels on the Rhine hampered the transport of goods for the German manufacturing sector, with vessels sailing at 20% capacity or less. Communities across France were subject to water restrictions, as drought conditions placed almost all French departments under alert.

This report is published alongside the NGFS Task Force on Nature's compendium of best practices for central banks and supervisors to address nature-related financial risks. The two reports are complementary: while the compendium offers practical guidance on available tools, this report sheds light on the specific legal channels through which one of the most material risks – water scarcity – may crystallise. Read together, they invite central banks, supervisors and financial institutions to identify, assess and monitor water scarcity as a concrete source of nature-related risk, and to draw on emerging best practices to respond.

1. Introduction

In July 2024, the NGFS published the final version of its Conceptual Framework to guide Action by Central Banks and Supervisors on nature-related financial risks.¹

The Framework defined nature-related financial risks as the risks of negative effects on economies, individual financial institutions and financial systems that result from: (i) the degradation of nature, including its biodiversity, and the loss of ecosystem services² that flow from it (i.e. physical risks); or (ii) the misalignment of economic actors with actions aimed at protecting, restoring, and/or reducing negative impacts on nature (i.e. transition risks).

Water scarcity³ is the quintessential example of a nature-related financial risk.⁴ Water offers various ecosystem services, including provisioning, regulating and cultural services. The degradation of these services can have significant economic and financial impacts. For that reason, the Framework identified the degradation of a freshwater ecosystem – the Colorado River Basin – as a key illustrative example to provide guidance to central banks and supervisors on the potential application of the risk assessment framework for nature-related financial risks.⁵ The Framework noted the importance of the climate-nature nexus, and emphasised that climate change, and the resulting rising global temperatures, is one of the main direct drivers of nature degradation, including by disrupting the water cycle.

For the purposes of this report, water scarcity refers to situations where water demand for human needs exceeds supply, regardless of whether the shortfall is caused by issues with the quantity or the quality of water, or a combination of both factors.⁶ The quantity and quality of water are two sides of the same coin. Droughts and other climatic conditions may impact the quantity of water available, and this may be difficult to remedy. Moreover, where the quality of water is negatively affected by factors such as pollution, the quantity of water usable for human consumption, agriculture and industry is reduced.⁷

This report outlines key legal considerations in respect of water scarcity as a nature-related financial risk, and explores their potential impacts for central banks, supervisors and the financial system. Such legal considerations may encompass litigation risks as outlined in previous NGFS reports⁸ as well as transition risks, in the context of the adoption of new policies or legislation to address water scarcity, or renewed efforts to enforce existing legislation.

1 NGFS (2024a).

2 Ecosystem services can be defined as the benefits to humans provided by the natural environment and ecosystems. They can be divided into provisioning ecosystem services, providing materials and energy for products that humans derive from the environment (e.g. food, medicine, fresh water, fuel); regulating ecosystem services, which regulate and maintain ecosystem services such as climate, pollination, water and air quality, and disease control; and cultural ecosystem services, providing non-material benefits which support mental and physical health, spiritual and religious values, and recreational activities (NGFS (2022a)).

3 European Environment Agency (2021) defines water scarcity as a mid-term water stress condition (e.g. seasonal, annual or multi-annual) occurring when the water demand for human needs frequently exceeds the sustainable supply capacity of the natural system in river basins.

4 NGFS (2020), p. 12 noted that risks related to water stress can be a consequence of physical shortages of water impairing the ability of business facilities that depend on water to operate (physical risks), as well as a consequence of (local) government action aimed at regulating the supply of available water through extraction restrictions or pricing (transition risks).

5 NGFS (2024a).

6 The definition of water scarcity follows the definition used by UN University Institute for Water, Environment, and Health (2026). The report notes “Any realistic diagnosis of water scarcity must therefore integrate both quantity and quality, recognising that degraded water quality reduces the real carrying capacity of human-water systems and can be as bad as physical depletion.” See also European Commission (2025a).

7 The scope of this report is limited to the legal aspects of water scarcity. This is due to the focus of recent research on water scarcity specifically, as outlined in section 2.2, which highlighted the consequences of water scarcity for the economy and financial system. Financial risks associated with other water-related weather events, such as floods, are not covered within the scope of this paper.

8 See NGFS (2021), NGFS (2023), and NGFS (2024b).

2. Background

2.1 Causes of water scarcity

It is important to understand the causes of water scarcity to identify and anticipate the legal aspects of that risk.

Legislation and policy efforts adopted by governments, along with litigation brought before courts, will often seek to target those causes of water scarcity with an impact on firms and financial institutions.

As a starting point, it is relevant to highlight that water is a finite resource. Water moves in a cycle which naturally stores, purifies and releases water, a process that depends on healthy soils, wetlands, forests and other ecosystems (the hydrological cycle). However, overexploitation and mismanagement of water resources, pollution as well as climate change and environmental degradation can affect this cycle and severely reduce both the quantity and the quality of water.⁹

Water scarcity can sometimes be addressed through the development of additional water supply infrastructure.

However, new facilities for surface water or groundwater extraction and storage, including dams and water transfers, may not always be feasible, depending on geographic or climatic factors. Moreover, investment in new infrastructure can carry significant public investment costs, can be politically and socially controversial, and can lead to further environmental degradation.¹⁰

There are limited means of obtaining water outside of the hydrological cycle. Water re-use is possible, to a certain extent, for agriculture, industrial processes and energy production.¹¹ Seawater desalination can provide water supply beyond the hydrological cycle, but it is costly, very energy-intensive, and entails significant environmental impacts.¹²

As noted above, for the purposes of this report, water scarcity is defined with reference to situations where the shortfall is caused either by issues with the quantity or the quality of available water, or a combination of both. These entail different problems and can have different scope for finding solutions. Shortfalls in the quantity of water that are caused by climate change or increased demand, including intensification of certain economic activities, may be difficult to remedy. Water quality issues caused by pollution could, in principle, be addressed by mitigation or remediation measures.

It is thus worth outlining the different factors, or combination of factors that may cause water scarcity, both in quantitative and qualitative terms.¹³ Each of these factors will be linked to different legal and governance aspects, including public policy and legislation; enforcement; investment; and litigation. Some key causes of water scarcity are listed below.¹⁴

- **Climate change:** Climate change is a significant driver, with global warming leading to the melting of glaciers and ice sheets, disruptions of the water cycle (due to stronger evaporation) increased frequency of extreme weather events like El Niño, and rising sea levels, which impact freshwater availability. With further climate change the regions affected by water scarcity will increase substantially.
- **Changes in land use:** Forests and other ecosystems, including wetlands and peatlands, play a key role in regulating the water cycle, recycling rainfall back into the atmosphere and sustaining precipitation far beyond their boundaries. Their loss or conversion to agriculture or urban uses reduces moisture recycling, increases surface runoff, and contributes to both water scarcity and flooding.¹⁵ In the Amazon, **deforestation** has already been shown to reduce rainfall across large parts of South America, with documented losses in hydropower,

9 UN University Institute for Water, Environment, and Health (2026).

10 Stupazzini (2024).

11 Regulation (EU) 2020/741 of the European Parliament and of the Council of 25 May 2020 on minimum requirements for water reuse, OJ L 177, 5.6.2020, p. 32.

12 European Commission (2025a); Almasoudai (2024); Rouane (2025).

13 This paper follows the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) criteria for assessing biodiversity loss and its associated impacts, see IPBES (2019).

14 European Environment Agency (2024a); European Environment Agency (2024b); Davies and Martini (2023).

15 European Forest Institute (2021).

agriculture, and urban water supply.¹⁶ As for **agriculture**, in addition to being a source of pollution, irrigation systems, water-intensive crops, and over-extraction of groundwater exacerbate the impact of agriculture on water scarcity.

- **Pollution:** Poor water management and pollution from nitrogen, pesticides, microplastics, PFAS, and industrial waste lead to water quality deterioration.¹⁷
- **Overexploitation: Population growth** and increased demand for water in **urban areas**, as well as for industrial and energy needs, further strain water resources. Additionally, demand from **industrial processes and energy production, especially new technologies**, can lead to overexploitation. Key sectors of the economy, especially those which are relevant to the climate and digital transitions, such as battery production, semiconductors, hydrogen, microchips, and data centres consume large volumes of water.¹⁸ **Artificial intelligence** also requires significant water resources.¹⁹ Moreover, **poor infrastructure** can lead to significant water losses

due to leakages. This is frequently due to lack of public or private investment in water infrastructure and can be exacerbated in the absence of water metering and/or appropriate pricing policies.²⁰ Finally, the negative impact of **armed conflict** on water resources includes the physical destruction of infrastructure caused by explosions and military movements, contamination of water by chemicals, and the presence of landmines or unexploded ordnance. Additionally, conservationists are often hindered to safely continue their work.²¹

- **Invasive non-native species:** Invasive non-native plants can reduce streamflow and threaten water security, while also degrading natural ecosystems, increasing soil erosion, and intensifying the impacts of fires and floods.²² In South Africa, invasive alien plants have been identified as one of the greatest threats to surface water and groundwater recharge.²³ Government action in South Africa – most notably through the Working for Water programme – has helped clear more than one million hectares of invasive alien plants since 1995.²⁴

Figure 1 **Causes of water scarcity and related legal issues**

Causes of water scarcity (IPBES)	Examples	Potential legal aspects
Climate change	• Melting of glaciers and ice sheets • Disruptions of the water cycle	• Human rights • Right to water • Right to protection from the serious adverse consequences of climate change
Changes in land use	• Deforestation • Agriculture (irrigation systems, water-intensive crops, and over-extraction of groundwater)	• Legislation on water management and pollution • Legislation and litigation on corporate sustainability due diligence • Litigation challenging public authorisations and licences
Pollution	• Nitrogen, pesticides, microplastics, PFAS, and industrial waste	• Legislation on water management and pollution • Enforcement by public authorities • Litigation
Over-exploitation	• Population growth and urban development • Demand from industrial processes and energy production, especially new technologies (data centres, artificial intelligence) • Poor infrastructure • Armed conflict	• Legislation on water management • Enforcement by public authorities • Litigation challenging public authorisations and licences • Infrastructure investment, public debt sustainability
Invasive non-native species	• Invasive non-native plants	• Legislation on water management • Enforcement by public authorities

16 Climate Policy Initiative / PUC-Rio and Amazônia 2030 (2025).

17 European Commission (2026).

18 European Commission (2025a).

19 Aczel *et al.* (2026).

20 Stupazzini (2024).

21 Wang (2026).

22 National Business Initiative (2019).

23 National Business Initiative (2019); see also Marais (2008) and Republic of South Africa, Department: Forestry, Fisheries and the Environment (2026).

24 Republic of South Africa, Department: Forestry, Fisheries and the Environment (2026); Marais (2008).

2.2 Consequences of water scarcity for the economy and the financial system

Water scarcity can have significant consequences for various sectors of the economy. Research by the European Central Bank (ECB) demonstrates that surface water scarcity is the most significant nature-related risk to the **euro area** economy.²⁵ In that research, the ECB found that a drought with a 1-in-100-year event could put up to 24% of euroarea economic output at risk from surface-water scarcity.²⁶ The agriculture sector would experience the largest proportional output losses, with up to 30% losses under a 25-year drought and up to 38% losses under a 100-year drought. Other sectors, including manufacturing, mining, watersupply utilities, construction, and accommodation and food services, would also face substantial impacts, with more than 20% of their output at risk even under a 25-year drought scenario. Research by the European Commission estimates current annual losses from drought to be around EUR 9 billion for the **EU and UK**, with the highest losses in Spain (EUR 1.5 billion/year), Italy (EUR 1.4 billion/year) and France (EUR 1.2 billion/year) – and these losses are only expected to increase in the near future.²⁷ In **South Africa**, water scarcity already caused production cuts, job losses, and economic decline during the Cape Town droughts from 2015 to 2018. Moreover, research has found that across water-sensitive municipalities, which generate nearly a quarter of South Africa's economic output, 9.8% of production and 22% of exports are directly vulnerable to water shortages.²⁸ In a survey of South African companies, most companies identified physical water-related risks, such as droughts, as the most significant threat to both their direct operations and value.²⁹

Environmental law and its enforcement can impact the manner in which firms are affected. Research concerning **Brazil and Chile** has demonstrated that regions with stricter environmental enforcement – including water governance, usage availability, and impact disclosures – see greater credit flows away from environmentally risky firms, and vice versa.³⁰

Water scarcity can also have significant impacts on state finances. States may have to allocate significant expenditure towards maintaining, adapting or expanding water infrastructure. This applies not only to long-term public investment: states and public entities generally also cover a large share of the uninsured costs of disaster relief, recovery and reconstruction. States may end up carrying significant costs to address not only droughts or other damage to water infrastructure caused by extreme weather events, but also issues related to water quality. A recent European Commission report estimates that, without regulatory action, continued PFAS pollution in Europe could cost around €440 billion by 2050. The report considered different scenarios, and found that regulatory action to address PFAS releases at source by 2040 would reduce these costs by EUR 110 billion. However, failing to take action, and relying on water treatment alone could cost more than EUR 1 trillion.³¹ In Denmark, for example, alarming levels of nitrates and pesticide residues are affecting the quality of drinking water country-wide. The city of Aalborg alone is asking the state to pay EUR 150 million to remove the harmful nitrates.³² All such costs can have implications for the states' sovereign debt, debt sustainability, and sovereign ratings³³ with relevance for the economy and the financial sector. It is thus important to ensure that countries have budgetary frameworks in place to enable their climate adaptation capacity, in view of the macro-fiscal relevance of the climate and nature crises, including water scarcity.

25 European Central Bank (2025); Ceglar (2025).

26 Note: a 1-in-100-year event is also referred to as a 100-year return period event. Similarly the Frost (BIS) (2025) found that while water use is positively correlated with output, higher water scarcity is associated with lower gross domestic product growth and investment, and higher inflation.

27 Feyen *et al.* (2020); Research by the ECB (Anyfantaki (2025)) found that droughts, though infrequent, have a longer duration and the higher economic damage compared to many other adverse climate-related events (e.g. floods).

28 Agence Française de Développement (2023).

29 National Business Initiative (2019); CDP (2010).

30 Orega and Ossandon Busch (CETEx) (2026).

31 European Commission (2026).

32 Politico (2026a).

33 Mongelli, Ceglar and Scheid (2025); Capiello, Ferrucci, Maddaloni, and Veggente (2025).

Water scarcity, as a nature-related financial risk, is also relevant for the work of central banks and supervisors.

Research by ECB staff has noted that over the longer term, the effects of persistent water shortages can spread through commodity markets, driving up water and food prices and contributing to broader inflationary pressures.³⁴ A Banque de France working paper shows that a water-related scenario combining chronic water scarcity with acute droughts could lead to stagflationary pressures in France, characterised by a persistent decline in economic activity alongside rising prices.³⁵ The ECB has also noted that water scarcity can also undermine financial stability: the ECB analysed the loans of 2,500 euro area banks that were granted to non-financial corporations at a sectoral level. It found that more than 19% of their total outstanding nominal amount – over €4.4 trillion – is currently extended to sectors exposed to high water scarcity risk under a drought scenario with a 100-year return period.³⁶ A study by De Nederlandsche Bank also found that 20% of bank loans issued by Dutch financial institutions to multinational corporations are exposed to extremely water-scarce regions.³⁷ In a similar vein, Deutsche Bundesbank found that more than half of the corporate loan volume of banks in Germany shows a high dependency on at least one water-based ecosystem service.³⁸

Financial systems in other locations around the world face similar – or frequently more serious – financial risks as a result of water scarcity.³⁹ Research by the World Bank and Bank Al-Maghrib has noted the potentially severe macroeconomic impact of multi-year droughts on the

Moroccan economy, along with corresponding impacts on the Moroccan banking sector, with approximately one-third of bank lending concentrated in regions and sectors highly exposed to physical climate risks.⁴⁰ Stress-testing analyses conducted on heavy industry companies in East Asia found that more than a third of firms analysed moved from investment-grade to speculative-grade credit ratings under severe water scarcity scenarios.⁴¹ In Malaysia a study found that 29% of the researched banks' commercial loan portfolios were tied to sectors highly dependent on surface water availability.⁴² Similarly, in Brazil, banks have an outstanding credit exposure of BRL 811 billion to non-financial corporates operating in sectors highly dependent on ecosystem services, with surface water identified as having very high dependence materiality.⁴³

Water scarcity has been identified as a risk that needs to be taken into account by financial institutions as part of their climate and environmental risk management – and, to some extent, already is.⁴⁴ The NGFS identified water stress as a driver of financial risk in its Guide for Supervisors on integrating climate-related and environmental risks into prudential supervision.⁴⁵ The ECB has emphasised that water stress is one of the main physical risks to firms in Europe stemming from climate change.⁴⁶ Both the ECB and the European Banking Authority (EBA) have highlighted water stress as a risk in the context of the ECB's supervisory expectations⁴⁷ and the EBA's guidelines⁴⁸ related to banks' management of climate and environmental risks. The Monetary Authority of Singapore has published Guidelines on Environmental Risk Management for certain

34 Parker (2016); Ciccarelli, Kuik and Martínez (2024).

35 Benoist *et al.* (2026).

36 European Central Bank (2025a). UK banks are also significantly exposed, with some institutions facing potential portfolio nVaR losses exceeding €2 billion from water-related risks alone (see, Green Finance Institute (2024)).

37 De Nederlandsche Bank (2019).

38 Deutsche Bundesbank (2026).

39 University of Cambridge Institute for Sustainability Leadership and HSBC (2022).

40 World Bank (2024).

41 University of Cambridge Institute for Sustainability Leadership and HSBC (2022).

42 World Bank (2022).

43 World Bank (2021); see also Pinto *et al.* (2025).

44 Certain EU banks, especially those active in the agricultural sector, have begun assessing the materiality of water-related risks through exposure analysis. Additionally, some banks employ metrics such as baseline water stress to evaluate both scope 1 emissions and country-level scores of water stress. See, Goumet *et al.* (2026).

45 NGFS (2020), p. 12.

46 European Central Bank (2021).

47 European Central Bank (2020), (2022a), (2022b).

48 European Banking Authority (2025).

financial institutions (such as asset managers, insurers, and banks), requiring them to develop tools to monitor and assess their exposure to environmental (including water scarcity, pollution, and droughts) risks.⁴⁹ OECD staff research has noted that water-related risks are ‘macrocritical’ for financial stability.⁵⁰

Moreover, the OECD has pointed to several areas for additional work and research to develop a better understanding of the financial materiality of water scarcity for the economy and the financial system, along with efforts to address those risks.⁵¹ The findings of OECD staff research recommend that disclosure requirements, scenario analysis and supervisory guidance on exposures, impacts and dependencies to water-related financial risks within the financial system should be strengthened to improve oversight and management of such risks. First, that research has pointed to the importance of improving disclosure standards for water-related risk, representing the largest share of nature-related macro-financial risks, with an estimated 7-9% of global GDP at risk, along with improving risk assessment tools to translate these into financial risks.⁵² Second, the research has noted the importance of the insurance sector, which plays a critical

role in determining the financial materiality of water-related risks.⁵³ The OECD staff research highlights evidence from supervisory stress tests showing that droughts and floods can significantly increase insurance claims and weaken solvency positions, underscoring the sector’s central role in absorbing water-related shocks.⁵⁴ Third, the research notes that sovereign borrowers are a large part of banks’ credit exposures, with national-level stress tests revealing the substantial impact of drought and flood risk on these sovereign-linked credit exposures. Further research is needed to identify the exposure of sovereign and municipal issuers to water-related risks, to ensure that this exposure is fully priced in.

Water scarcity will also undermine efforts to mitigate and adapt to climate change, and thereby manage climate-related financial risks. Healthy and functioning water ecosystems offer valuable ecosystem services for climate mitigation and adaptation to climate change, since they can act as carbon sinks, facilitate renewable energy generation, provide drinking water and irrigation water, regulate water flows and extreme conditions and support biodiversity.⁵⁵

49 MAS (2020).

50 Davies and Martini (2023). Their research focuses more broadly on ‘water-related risks’ which encompass “too much, too little and polluted water, and disruption to the freshwater systems”. OECD (2025).

51 Davies and Martini (2023); OECD (2025).

52 Davies and Martini (2023); OECD (2025).

53 IVASS (2025). A 2025 report by the Italian Institute for the Supervision of Insurance reinforces this point, finding that over 75% of insurance companies assessed physical and transition risks as material, while claims and expenses linked to climate-related events, including drought-related risks, have increased.

54 OECD (2025).

55 Puharinen (2021).

3. Access to water and human rights

3.1 The right to water under international law

Water has been recognised as a fundamental human right at international level.⁵⁶ On 28 July 2010, the United Nations General Assembly recognised the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights.⁵⁷ As regards the legal underpinning, the UN Human Rights Council clarified by resolution that the right to water and sanitation “is derived from the right to an adequate standard of living and inextricably related to the right to the highest attainable standard of physical and mental health, as well as the right to life and human dignity.”⁵⁸

Several international treaties explicitly recognise the right to water. The most pertinent examples are found in two of the most widely ratified international treaties.⁵⁹ Article 14(2)(h) of the 1979 Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) stipulated that rural women should enjoy an adequate water supply.⁶⁰ Similarly, in relation to the “highest standard of attainable health”, Article 24 of the 1989 Convention on the Rights of the Child (CRC) provides that “the provision of adequate ...clean drinking-water” is essential to the health of the child, and includes the requirement to take into consideration the dangers and risks of environmental pollution. The right to water is also implicitly recognised in Article 27(1)

of the CRC, which guarantees the right to an adequate standard of living, and in Article 6(1) of the CRC on the right to life.⁶¹

Other international treaties have been interpreted to encompass the fundamental human right to water,⁶² most notably the **International Covenant on Economic, Social and Cultural Rights (ICESCR)**. In 2003, the UN Committee on Economic, Social and Cultural Rights (CESCR) published its General Comment No. 15⁶³ to the ICESCR. It noted that “the human right to water is indispensable for leading a life in human dignity”. It found the right to water to be implicit in Article 11(1) on the right to adequate food and housing and 12(1) on the right to health.⁶⁴ It further clarified that the right to water means that water must be available in sufficient quantities; acceptable, in terms of colour, odour and taste; accessible, both physically and economically; and of a quality that ensures it does not pose a risk to human health.

The International Covenant on Civil and Political Rights (ICCPR) has also been interpreted to encompass a right to water, albeit primarily in connection with minimum survival requirements.⁶⁵ In 2019, the UN Human Rights Committee⁶⁶ published its General Comment No. 36 on ICCPR. It considered that the guarantee of the right to life under Article 6 of the ICCPR, read in conjunction with the duty to ensure the rights under the ICCPR under Article 2, includes an affirmative “duty to protect life” including through measures to “ensure access without delay by

56 Satterthwaite (2021); Keller and Hefti (2022); Benöhr (2023).

57 UN General Assembly (2010); UN General Assembly (2014).

58 UN Human Rights Council (2010). The Council referred to the Universal Declaration of Human Rights, and to the other international human rights Treaties referred to in this section.

59 In addition, explicit reference to the right to access clean water services is found in the Convention on the Rights of People with Disabilities.

60 See also UN CEDAW (2016), paras 56 and 59.

61 Satterthwaite (2021).

62 In addition to the ICESCR and ICCPR, the right to water has been interpreted as implicit in the Convention Against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment; and the International Convention on the Elimination of All Forms of Racial Discrimination.

63 The UN Committee on Economic, Social and Cultural Rights (CESCR) is a body of 18 independent experts that monitors the implementation of the ICESCR by its States parties. The CESCR also examines complaints from individuals or groups who claim their rights under the ICESCR have been violated, according to the Optional Protocol to the ICESCR.

64 UN Committee on Economic, Social and Cultural Rights (2002).

65 Satterthwaite (2021).

66 The UN Human Rights Committee is a body of 18 independent experts that monitors the implementation of the International Covenant on Civil and Political Rights (ICCPR) by its State parties. It examines reports from States, addresses concerns and recommendations, and considers individual complaints.

individuals to essential goods and services”, including water and sanitation.⁶⁷ This recognition was illustrated in a decision concerning New Zealand’s handling of an individual’s claim of refuge from climate-related impacts in Kiribati. The Human Rights Committee recognised that the lack of access to drinking water, as well as other grave impacts of climate change, may – as it worsens in the future – amount to a threat to the right to life under the ICCPR. While this individual case was rejected, the Committee signalled that similar cases may be successful as climate change worsens.⁶⁸

3.2 The right to water under regional human rights treaties

The right to water has also been recognised, to varying degrees, in regional human rights treaties.

The European Court of Human Rights (ECtHR) has found aspects of the rights to water and sanitation to be inherently protected by the European Convention on Human Rights (ECHR).⁶⁹ Specifically, the Court has held that the protection against inhuman or degrading treatment and torture requires that detainees are provided with potable water and basic sanitation.⁷⁰ Moreover, water quality – in particular the protection of water from pollution – has been addressed through the ECtHR’s case law. For example, in the case of *Tătar v. Romania*, the ECtHR held that Romania violated Article 8 ECHR (the right to respect for private and family life). This violation stemmed from the Romanian authorities’ failure to adequately protect the applicants’ right to a healthy and protected environment, specifically in relation to the operation of a gold mine using cyanide leaching that led to water pollution.⁷¹ The Court held that the State was under a

positive obligation to adopt reasonable and sufficient measures to protect the rights of the interested parties to respect for their private lives and their home and, more generally, a healthy, protected environment. In this respect it is notable that the Court in *Tătar* emphasised the importance of the precautionary principle – which was endorsed by the Court in the recent rulings of *Verein KlimaSeniorinnen v Switzerland* and *Cannavacciuolo and Others v Italy*.⁷² Moreover, in *Cannavacciuolo*, the ECtHR explicitly held that environmental pollution – which included contamination of groundwater – can constitute a threat to the right to life as enshrined under Article 2 ECHR.⁷³

The Inter-American Court of Human Rights (IACtHR) has already explicitly addressed the right to water under the American Convention on Human Rights (ACHR) in the context of its recent advisory opinion on climate change. On 2 July 2025, the IACtHR published its advisory opinion concerning the scope of States’ obligations to protect human rights in the context of climate change.⁷⁴ The IACtHR held that Member States of the Organization of American States (OAS) are legally bound to adopt measures to address the climate crisis under the ACHR. As regards the right to water, the Court recalled its case law establishing that the right to water is protected under Article 26 of the ACHR (progressive development).⁷⁵ The Court noted that the climate emergency poses a serious threat to the guarantee of the right to water. In view of that fact, the Court held that, in order to prevent and mitigate those effects, States must take into account the possible impacts on water security when evaluating environmental impact studies and any other decision concerning projects or activities that may cause the degradation of watersheds, aquifers and soils, or that otherwise threaten water sources that are essential to the subsistence of communities or population groups.

67 UN Human Rights Committee (2019).

68 UN Human Rights Committee (2020), *Teitota v. New Zealand*, UN Doc CCPR/C/127/D/2728/2016.

69 Keller and Hefti (2022).

70 Ibid.

71 ECtHR (*Tătar v Romania*), para 97; see also ECtHR (*Dubetska and Others v Ukraine*), para 119.

72 ECtHR (*Verein KlimaSeniorinnen v Switzerland*), para 364; ECtHR (*Cannavacciuolo and Others v Italy*), para 390 and 465.

73 Ibid. The ECtHR established that Italian authorities had failed to protect the right to life of the affected citizens of the affected area – the Terra dei Fuochi – by failing to address the issue of pollution with diligence and expedition, despite having known of such ‘systemic’ pollution issues at least since 1995.

74 IACtHR (Advisory Opinion OC-32/25). See [translation](#) of the opinion in English.

75 IACtHR (*Indigenous Communities of the Lhaka Honhat (Our Land) Association v. Argentina*).

The African Commission on Human and People's Rights (ACHPR) has likewise inferred a right to water from the African Charter of Fundamental Rights.⁷⁶ The ACHPR has recognised that the Charter implicitly encompasses the human right to sufficient, safe, acceptable, physically accessible and affordable water, and has urged African state parties to the Charter to give effect to that right in a specific ACHPR Resolution on the Right to Water,⁷⁷ the ACHPR's interpretative Guidelines (including Guidelines dedicated exclusively to the right to water),⁷⁸ as well as the ACHPR's recommendations in individual cases.⁷⁹ Already in its recommendation in the *Zaire* case in 1993, the ACHPR articulated that the failure to provide safe drinking water constitutes a violation of Article 16 – the right to health.⁸⁰ In the *Ogiek* decision, the ACHPR read the right to clean water into Article 22 – the right to economic, social, and cultural development.⁸¹ The right to water has, however, featured most famously in *SERAC v Nigeria*, where it was established that both Articles 6 and 22, read together with the right to life under Article 4 and the right to a general satisfactory environment favourable to their development under Article 24, require states' legislation to take preventative steps to preserve the natural environment, which includes providing access to water. On the facts of the case, the ACHPR found a violation, where the failure to ensure access to water

led to “humanly unacceptable” levels of environmental degradation through water contamination.⁸² The implicit right to water was later reaffirmed in the *COHRE* case.⁸³

3.3 The right to water under national law

The recognition and enforceability of a ‘right to water’ in individual jurisdictions has been developing steadily over the past decades, with the introduction of explicit rights in national constitutions or legislation. Academic research⁸⁴ and research by the UN Special Rapporteur on the human rights to safe drinking water and sanitation⁸⁵ has identified 46 national constitutions that explicitly protect either the right to water (38)⁸⁶ or the rights to both water and sanitation (8).⁸⁷ Moreover, an additional 19 jurisdictions have been identified as recognising the right to water and sanitation in national legislation.⁸⁸

Even where there is no explicit guarantee of the rights to water and sanitation in the national constitution, Courts in many jurisdictions have recognised those rights as following from other fundamental rights.

76 The African Commission on Human and People's Rights (ACHPR) is quasi-judicial body established by the African Charter of Fundamental Rights to promote and protect human and people's rights in Africa. ACHPR is mandated with interpreting the Charter, as well as reviewing complaints regarding violations of the Charter lodged by states, individuals and non-governmental organisations.

77 ACHPR (2015) *Resolution on the Right to Water Obligations*.

78 ACHPR (2019) *Guidelines on the Right to Water in Africa*, para 12; ACHPR (2011) *Guidelines and Principles on the implementation of Economic, Social and Cultural Rights in the African Charter on Human and Peoples' Rights* (Nairobi Guidelines), para 88.

79 Despite significant political and moral weight, ACHPR's decisions regarding the complaints (known as “recommendations”) are non-binding. Binding force can be acquired if the relevant ACHPR activity report, stating ACHPR's findings and recommendations, is adopted by the Organisation of African Unity Assembly of Heads of State and Government, or if the ACHPR refers the case to the African Court of Human and People's Rights.

80 ACHPR (*Free Legal Assistance Group and Others v. Zaire*, Comm. No. 25/89, 47/90, 56/91, 100/93), para 47.

81 ACHPR (*Centre for Minority Rights Development (Kenya) and Minority Rights Group (on behalf of Endorois Welfare Council) v. Kenya*, Comm. No. 127/03), paras 286-288.

82 ACHPR (*Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) v. Nigeria*, Comm. No. 155/96).

83 ACHPR (*Sudan Human Rights Organisation & Centre on Housing Rights and Evictions (COHRE) / Sudan*, Comm. No. 279/03-296/05).

84 Satterthwaite (2021); Brunner *et al.* (2015).

85 Heller (2020).

86 Based on the research of Satterthwaite (2021) and Heller (2020) the following countries can be identified: Bolivia, Cuba, Democratic Republic of the Congo, Egypt, Eritrea, Ethiopia, the Gambia, Hungary Iran, Maldives, Mauritania, Mexico, Morocco, Nicaragua, Niger, Panama, People's Republic of China, Philippines, Slovenia, Solomon Islands, Somalia, South Africa (see, for instance, Sections 24 and 27(1)(b) of the Constitution of South Africa), South Sudan, Thailand, Tunisia, Uganda, Venezuela, Zambia, and Zimbabwe. Heller (2020) also identified some protection of the right in the United States of America (at state level).

87 Burkina Faso, the Dominican Republic, Ecuador, Fiji, Honduras, Kenya, Nepal, Uruguay.

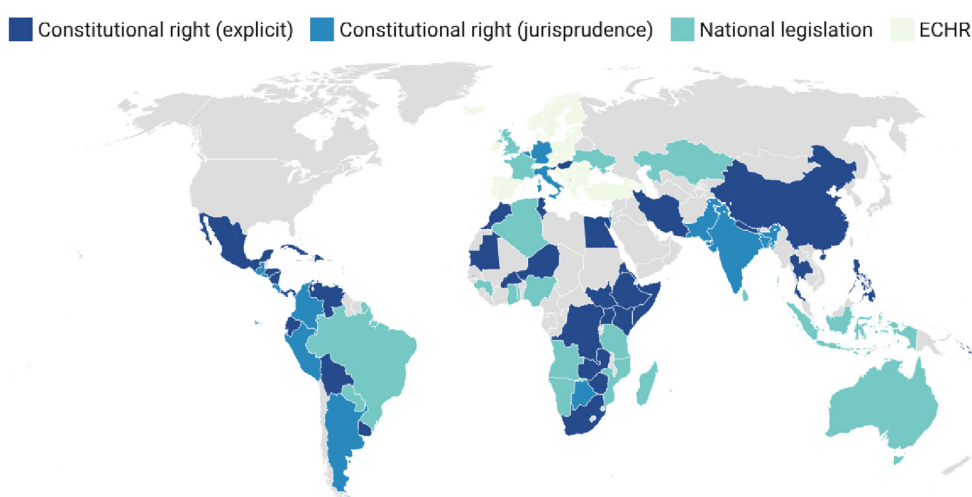
88 Australia, Algeria, Angola, Brazil, France, Ghana, Guinea, Indonesia, Kazakhstan, Madagascar, Mozambique, Namibia, Nigeria, Paraguay, Sri Lanka, Tanzania, Togo, Ukraine, United Kingdom. See Brunner *et al.* (2015); Heller (2020). NB: Legislation on water protection and management is covered in Section 5 of this paper, including, for example, national measures implementing the recast EU Drinking Water Directive of 1998 (Directive (EU) 2020/2184).

Academic research has identified 14 such examples.⁸⁹ The rights to life, dignity, health, and the right to a healthy environment have been interpreted to encompass the rights to water and sanitation. In India, for instance, the constitution does not explicitly provide for the right to water. However, the Supreme Court has interpreted Article 21 (the right to life) to include access to clean and safe water, holding that it is essential for the enjoyment of life.⁹⁰ Indian courts have further linked water access to environmental protection and sustainable development, such as in cases addressing water pollution, including the contamination of the Jojari River in Rajasthan, where the Court emphasised the urgency of protecting water resources for public health and ecological integrity.⁹¹ In addition, in various jurisdictions the rights to non-discrimination and equality, as well as the right to be free from degrading treatment, have often been constructed to include access to water and sanitation for specific populations. Some of these cases have explicitly referred to the right to water

under international law, noting the UN General Assembly's decision to recognise water and sanitation as a human right and/or General Comment No. 15 to the ICESCR.⁹²

It should be noted that the constitutionalisation of the right to water is most effective in countries with strong democratic governance. Empirical research has noted that in addition to the rule of law, demographic, and economic factors also matter.⁹³ Moreover, it is notable that the right to water has not traditionally been embedded in the constitutions of countries in the Global North, including the US, Canada, and many EU countries. Thus, it remains to be seen how the right to water might develop as the populations in the Global North become more exposed to water scarcity as a result of climate change and nature degradation. This may complement other movements, such as the rights of nature movement.⁹⁴

Figure 2 **Water as a human right**



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89 These include decisions of courts in Argentina, Bangladesh, Belgium, Botswana, Colombia, Costa Rica, El Salvador, Germany, Guatemala, India, Israel, Italy, Pakistan, and Peru. Italy and Germany are examples of this approach. Although neither constitution expressly recognises a right to water, the Italian Constitutional Court has treated water protection as implicit in constitutional values, describing water as a “primary good for human life” and a resource to be safeguarded (Italian Constitutional Court, No. 259/1996; No. 57/2026). In Germany, while courts have not recognised an enforceable right to water, the social state principle and the objective dimension of fundamental rights support a subsidiary State responsibility to ensure goods and services necessary for human existence, including adequate water supply; the Federal Constitutional Court has also held that drinking water supply has absolute priority among competing water uses (BVerfG, *Nassauskiesungsbeschluss*, 15 July 1981, 1 BvL 77/78, para. 198; Laskowski (2010)).

90 *Subhash Kumar v. State of Bihar*, (1991) 1 SCC 598. See also *Malayampattu Eri Pasanadarar Sangam v. The District Collector and others*, (2010) 4 LW 877.

91 *In Re: 2 Million Lives at Risk, Contamination in Jojari River, Rajasthan*, (2017) SCC OnLine SC 1093. The Supreme Court directed immediate action to address water pollution, emphasising the precautionary principle, sustainable development, and intergenerational equity. See also *A.P. Pollution Control Board II v. Prof. M.V. Nayudu (Retd.) and Ors.*, (2001) 2 SCC 62, where the Court held that access to clean drinking water is fundamental under Article 21 and recognised the State’s duty to provide it. Additionally, *Hemant Kumar Shikarwar v. State of Jharkhand and others*, W.P. (PIL) No. 2580 of 2011, upheld the right to pollution-free water as essential for life.

92 Satterthwaite (2021); Heller (2020).

93 Schiel, Langford and Wilson (2020).

94 See for instance, rights of nature concerning rivers and how this relates to water contamination and pollution, NGFS (2024b); Politico (2026b).

3.4 Outlook: the right to water and climate change

The status of the ‘right to water’ may be expected to develop further in the wake of recent rulings of international and regional courts on the link between climate change and human rights. First, as noted above, the advisory opinion of the IACtHR explicitly addressed the impacts of the climate emergency on the right to water, and the obligations on States to take this into account. Second, in *Verein KlimaSeniorinnen v Switzerland*, the ECtHR held that Article 8 ECHR (the right to respect for private and family life) encompasses a right for individuals to effective protection by the State authorities from the serious adverse effects of climate change on their life, health, well-being and quality of life. While the ruling did not address the right to water specifically, it is likely that ECtHR jurisprudence will continue to develop, to ensure States take appropriate action to protect their citizens from the impacts of water scarcity on their rights under Article 8 ECHR, taking into account the findings on water quality in *Tătar v Romania*.

The recent advisory opinion of the International Court of Justice (ICJ) of 23 July 2025 also explicitly referred to the right to access water as an element of the right to an adequate standard of living, protected under various international human rights treaties.⁹⁵ The ICJ noted the impact of climate change on water scarcity.⁹⁶ It then held that a clean, healthy and sustainable environment is a precondition for the enjoyment of many human rights, such as the right to life, the right to health and the right to an adequate standard of living, including access to water, food and housing.⁹⁷

Although the advisory opinions of the ICJ and IACtHR are generally non-binding, the international treaties they interpret carry binding force. As such, these opinions hold considerable potential to influence domestic judicial decisions and policy development, generate new climate-related litigation, and shape the understanding of State obligations under both treaty law and customary international law.⁹⁸

Moreover, citizens movements and strategic litigation may place further pressure on jurisdictions to recognise and take action on the right to water, leading to the further development of law and policy.⁹⁹ Protests in the 1990s against privatisation of water in Cochabamba, Bolivia’s third largest city, led to the cancellation of a contract with a joint venture. Ultimately, the government of Bolivia pushed for recognition of the right to water by the UN General Assembly in 2010.¹⁰⁰ In 2013, a European Citizens Initiative, ‘Right2Water’, received over 1.6 million signatures.¹⁰¹ This led to a Communication by the European Commission,¹⁰² and eventually to a review of the EU’s Drinking Water Directive in 2020.¹⁰³ More recently, citizen engagement in the ‘March for Clean Water’ in the UK in November 2024 is credited with driving forward new legislation to address water quality in the UK, under the Water (Special Measures) Act 2025.¹⁰⁴ ‘Clean Water Now’, a collective initiative, continues to press UK policymakers for water-policy reforms.¹⁰⁵ In France and Germany, protests in Volvic and Grünheide against Danone and Tesla, respectively, drew media attention to accusations that these companies were depleting local water sources.¹⁰⁶ Even the mass protests against the Iranian regime earlier this year were fuelled, at least in part, by severe water scarcity due to government inaction.¹⁰⁷

95 ICJ (Advisory Opinion), para. 380. The ICJ noted that the right to an adequate standard of living encompasses access to food, water and housing, as set out in Article 11 of the ICESCR and Article 25 of the Universal Declaration of Human Rights.

96 ICJ (Advisory Opinion), para 73.

97 ICJ (Advisory Opinion), para. 393.

98 Sthoege (2023).

99 Batros and Khan (2022).

100 Satterthwaite (2021).

101 Benöhr (2023). The European Citizens’ Initiative was established by the Lisbon Treaty as an instrument of participatory democracy. It allows one million citizens from at least seven Member States to request the European Commission to prepare a legislative proposal on areas of EU competences.

102 European Commission (2014).

103 Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption (recast) OJ L 435, 23.12.2020, p. 1.

104 Fry, Smith and Jennings (2024).

105 Earthwatch Europe (2026), “Clean Water Now: Environmental groups launch major new campaign ahead of Water Reform Bill”, 26 February 2026.

106 Partzsch (2025).

107 Meadway (2026).

3.5 'Water rights' versus the 'right to water'

The concept of 'water rights' differs from the right to water. The right to water, considered in detail in the sections above, concerns the fundamental human right to access safe, sufficient and affordable water for personal or domestic use. By contrast, 'water rights' are relevant to those seeking to use water beyond domestic use, for agriculture, industry or to supply municipalities.¹⁰⁸ Thus, water rights are particularly relevant for corporates.

While the legal status of water resources differs substantially across the globe, 'water rights' (i.e. legal entitlements to use water) can generally be characterised as property rights. Depending on the jurisdiction, they may be treated as a species of common property (each common owner can use water, with no collective decision-making, considering the rights of other users), private property, or public property (managed or controlled by the state).¹⁰⁹

Different models governing 'water rights' have developed across the globe, and across common law and civil law jurisdictions.¹¹⁰ In civil law jurisdictions most water resources are generally considered to be subject to public ownership. Thus, any use of water is subject to authorisation, licences or permits granted by the state (i.e. an administrative system of water rights).¹¹¹ In common law jurisdictions, water rights tend to be treated as linked

to land ownership, and subject to various doctrines such as riparian rights;¹¹² or treated as common property. Jurisdictions such as the US and Canada were influenced by the varying approaches of civil and common law, with different models applied by different federal states; and different regimes applied to surface water and groundwater resources, respectively.¹¹³ However, many common law jurisdictions¹¹⁴ and US federal states¹¹⁵ have now established statutory regimes in respect of water, and have made the use or abstraction of water resources subject to state control.

Thus, across many jurisdictions, notwithstanding differences in the legal regimes in place, the abstraction and use of water resources are generally subject to state control.¹¹⁶ The use of water resources can be regulated through authorisations, licences or permits granted by the state, either as a derogation of sovereign power,¹¹⁷ or as a restriction on the right to property.¹¹⁸

The need for state control of water resources has become increasingly indispensable, due to climate change.

This means, at least theoretically, that corporates will have limited legal arguments to demand access to water, as a 'right', in particular when applying for new or expanded permits to use water. That said, with globalisation, many large companies have already been able to gain long-term access to water through long-term permits, concessions or contracts with states that are legally enforceable, and subject to compensation or other protection of interests.¹¹⁹

¹⁰⁸ Fry, Smith and Jennings (2024).

¹⁰⁹ Bosch, Gupta and Verrest (2021).

¹¹⁰ Cavallo Perin and Casalini (2010).

¹¹¹ Ibid, in particular referring to France, Italy, Spain, and Germany.

¹¹² A riparian regime is a legal regime that allows anyone whose land abuts a flowing water source to make use of it, subject to the principle of reasonableness.

¹¹³ Buchanan (2024); Scanlan (2019); Christensen and Lintner (2007).

¹¹⁴ See e.g. **UK** (Water Resources Act 1963), **Ireland** (Water Environment (Abstractions and Associated Impoundments) Act 2022), **Canada** (Canada Water Act 1970). See Cavallo Perin and Casalini (2010).

¹¹⁵ See e.g. California's Sustainable Groundwater Management Act 2014. See Scanlan (2019).

¹¹⁶ For example, all European Union Member States are subject to the Water Framework Directive, which requires all Member States to put in place controls over the abstraction of fresh surface water and groundwater.

¹¹⁷ Bosch, Gupta and Verrest (2021) noted that of their sample of 60 countries (20 Anglophone and 21 Francophone African countries; 19 Asian countries), most states have put water in the public domain and governments are the custodians of the nation's freshwater.

¹¹⁸ Cavallo Perin and Casalini (2010).

¹¹⁹ Bosch, Gupta and Verrest (2021).

4. Water scarcity and litigation risk

4.1 Rights-based litigation

The increasing recognition and justiciability of the right to water as a human right will have consequences for states and public entities, and thereby also for the economy and the financial system. States and public entities must give effect to the right to water through appropriate policies and legislation. Litigation may increasingly be used to enforce that right, in the context of climate change, not only by compelling states to provide drinking water, or to tackle pollution,¹²⁰ but by challenging authorisations, development plans, or even fixed water charges¹²¹ that undermine that right, using rights-based arguments.¹²² This drives transition risk, as states and public authorities may need to adopt ambitious environmental policies and climate mitigation and adaptation policies, to ensure their citizens' fundamental rights are respected.¹²³

4.2 Litigation challenging project authorisations and licences

Evidence of litigation risk arising from concerns about water scarcity is also emerging in the context of project authorisations and licensing with and without the use of rights-based arguments. A large number of cases have been identified, where the authorisations of projects or activities that may impact the availability and quality of water are being challenged, including arguments arising from the impact of climate change.

30 cases against project authorisations and licensing have been identified, from across 14 jurisdictions (excluding the United States).¹²⁴ See Annex for further details.¹²⁵ These include cases challenging the authorisation of **fracking and oil drilling**,¹²⁶ **mining**, including coal and lithium extraction,¹²⁷ construction of **thermoelectric plants**,¹²⁸ a **dam project**,¹²⁹ and **data centres**.¹³⁰ Plaintiffs include not only affected citizens, indigenous communities and NGOs, but also public authorities, such as regional governments, and even a public utility company managing city drinking water supplies.¹³¹ Defendants include state

120 **Spain** (Mercedes Álvarez de León and others v. Regional Government of Galicia and the Miño-Sil River Basin Authority (As Conchas)).

121 **South Africa** (High Court of South Africa, Forum/SAPOA vs City of Cape Town, Case no: 103018/2025 of 20 April 2026).

122 See for example, rights based cases in **Colombia** (Constitutional Court cases: *Decision T-218/17*; *Decision SU-698/17*; *Decision C-035/16*; *Atrato River Decision T-622/16*. See also *Combeima River case of September 14, 2020*; *Wayúu Indigenous community and others v. Ministry of Environment and others*) and **Mexico** (Access to Minimum Water Volumes in Querétaro); **Nigeria** (Centre for Oil Pollution Watch (COPW) Vs NNPC (2018) Supreme Court of Nigeria); **Pakistan** (Ali v. Federation of Pakistan).

123 NGFS (2020).

124 See for example, cases in the following jurisdictions: **Argentina** (OIKOS Red Ambiental v. Mendoza Province); **Australia** (Nature Conservation Council of NSW v. Minister for Water, Property and Housing; *Whitehaven Coal Pty Ltd v. Australian Conservation Foundation & Ors*); **Brazil** (Arayara Association of Education and Culture v. Copelmi Mineração Ltda. and FEPAM; *Instituto Internacional Arayara v. IBAMA and others*; *Instituto Verdeluz and others v. Portocem Geração de Energia S.A. and SEMACE*; *Duda Salabert Rosa vs. Minas Gerais State and Taquaril Mineração S.A.*); **Chile** (Municipality of Cerrillos (Google Data Center) v/ Evaluation Commission of the Metropolitan Region; *Astorga and Others vs. Environmental Assessment Service (SEA)*; *Regional Government of Atacama v Ministry of Mining and Other*; *Jara Alarcon Luis v. Environmental Assessment Service*; *Modatima et al. v. Environmental Assessment Agency (SEA)*); **Colombia** (see fn 113); **France** (*Eau de Paris v. Bridge Energies and the Prefect of Seine-et-Marne*); **Namibia** (Ncumcara Community Forest Management Association v The Environmental Commissioner); **Nigeria** (see fn 113); **Romania** (Mihaileni Dam Project; *Declic v Hunedoara Environmental Protection Agency and Samax Romania*); **South Africa** (Philippi Horticultural Area Food & Farming Campaign, *et al.* v. MEC for Local Government, Environmental Affairs and Development Planning: Western Cape, *et al.*); **Turkey** (Diyarbakir Bar Association & Ecology Association vs. Diyarbakir Governorship; *Nature Association and Others v. Manisa Governorship and Others*); and the **United Kingdom** (*Foxglove and Global Action Plan v. Secretary of State for Housing, Communities and Local Government*).

125 Monitoring has taken place on the basis of reporting by the members of the NGFS, along with research using the Climate Change Litigation databases of the Sabin Center for Climate Change Law (Columbia University). The distinction between US and non-US (Global) cases used in this report follows from the design of the Sabin Center's Climate Litigation databases, which originally had separate databases for US and non-US (global) cases respectively, also in view of the large volume of US cases.

126 See cases in Argentina, France, Namibia, Nigeria and Turkey, *ibid.*

127 See cases in Australia, Brazil, and Chile, *ibid.*

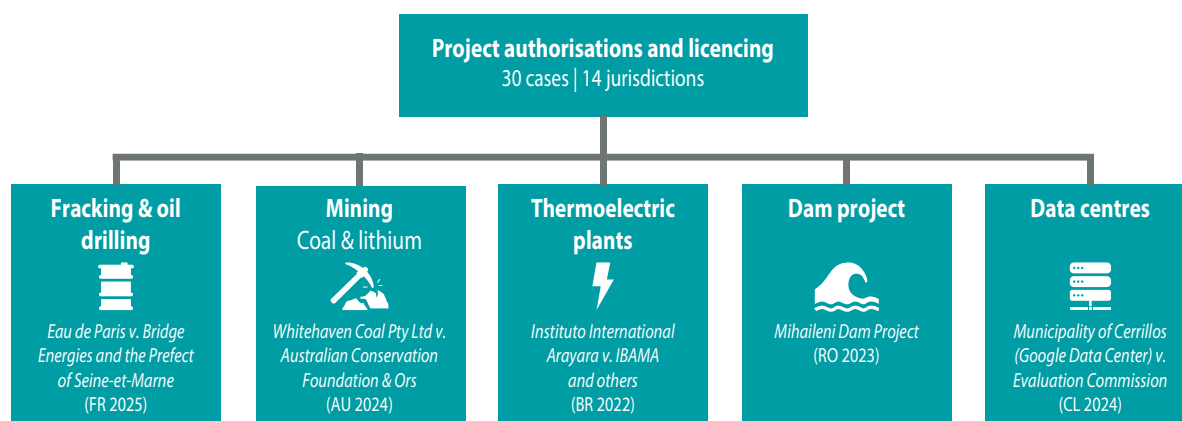
128 See cases in Brazil, *ibid.*

129 See case in Romania, *ibid.*

130 See cases in Chile and the UK, *ibid.* See also *Jackson* and Bradeen (2026).

131 See case in France, *ibid.*

Figure 3 Categories of cases against project authorisations and licensing



or public authorities granting such licences or approvals, along with the private companies requiring such approvals.

Litigation may also be initiated by private companies subject to such authorisation or licencing requirements.

In a case in Pakistan, a private company unsuccessfully challenged the State's refusal to grant permission for new or expanded **cement plants**, due to the risk of depleting groundwater and other harmful environmental impacts in an environmentally fragile area.¹³²

In addition to the cases cited above, a large number of cases challenging project authorisations and licences have also been identified in the US. These include cases concerning the authorisation or licencing of drilling, mining, and dam construction – as well as development plans with less apparent impacts on water resources. Cases have been brought before US courts concerning allegations of insufficient consideration of the impacts of timber harvesting,¹³³ a sports complex¹³⁴ or concentrated animal feeding operations on water quality and supply.¹³⁵ The challenges based on water impacts have extended beyond authorisations of private development projects to include public initiatives and other exercises of state or local authority. Examples include litigation over restoration plans,¹³⁶ standards and volume requirements for renewable fuel¹³⁷ or even long-term contracts with local utilities companies.¹³⁸ While the high volume of

such cases is unsurprising given the US litigious legal culture, this trend appears to have been reinforced by the federal Clean Water Act (CWA). The CWA aims to protect US waters by regulating discharges of pollutants and setting quality standards for surface waters. Notably, the CWA prohibits the discharge of any pollutant from a point source into navigable waters without obtaining a permit. As a result, water considerations have been brought to the fore and, in some instances, even weaponised as supplementary challenges or gateways for challenges originating from other environmental or broader socioeconomic concerns.¹³⁹

4.3 Relevance for financial and non-financial institutions

More stringent or better enforced legislation, along with litigation, can impact projects and investments that rely on or can impact water supply. Thus, these legal aspects can pose an immediate and direct risk to financial and non-financial institutions with a financial interest in such projects. Projects may be delayed or made more costly, or even be blocked altogether, potentially resulting in financial losses and stranded assets. Moreover, companies may be more exposed to enforcement actions and actions for damages arising from pollution or depletion of water resources.

¹³² **Pakistan** (DG Khan Cement Company v. Government of Punjab).

¹³³ See *Green Climate v. Rollins*.

¹³⁴ See *Save Our Sherwoods v. U.S. Department of the Interior*.

¹³⁵ See *Washington State Dairy Federation v. Washington Department of Ecology*.

¹³⁶ See *Soka Gakkai International-USA v. U.S. Army Corps of Engineers*.

¹³⁷ See *National Wildlife Federation v. EPA*.

¹³⁸ See *Protect Our Aquifer v. Tennessee Valley Authority*.

¹³⁹ See for example *Friends of the Headwaters v. Minnesota Pollution and Shrimpers and Fishermen of the RGV v. U.S. Army Corps of Engineers*.

5. Legislation on water management and pollution prevention

As noted above, irrespective of whether states recognise a right to water, most jurisdictions have in place some form of water management and/or pollution prevention legislation.¹⁴⁰ This reflects the fact that water is a limited and valuable resource, which is essential for society and the economy. This section outlines some examples of legislative frameworks, and how these frameworks interact with nature-related financial risks.¹⁴¹

States may have to update and strengthen water management and pollution prevention legislation or enhance enforcement, in order to address water scarcity issues. In particular, as states develop and adopt climate adaptation measures, they will inevitably need to consider the effectiveness of water management and pollution prevention legislation and may need to strengthen that legislation to secure society and the economy against the worst effects of climate change.

This may impact state decisions authorising, subsidising, or incentivising private-sector activities, thereby limiting certain economic activities, in particular, in view of the need to prioritise citizens' right to water and/or protect important economic sectors. Certain jurisdictions have already adopted reinforced legislation and sought to enhance enforcement,¹⁴² while others have signalled their intention to update their legislative and enforcement frameworks in the near future.¹⁴³

However, water management and pollution prevention legislation may also be subject to calls for simplification, to reduce regulatory burden on the private sector, and thereby enhance economic growth. In that context, it will be essential for states to find a balance between the short- and the long-term interests of economic actors, and to provide legal certainty for financial and non-financial institutions in their jurisdictions.

5.1 Legislation in the European Union

The European Union (EU) has developed an extensive legislative framework to protect the quality and availability of water in Europe over the past 30 years, including by regulating the abstraction and use of water resources, and adopting pollution prevention and control measures.¹⁴⁴ This has generally been adopted under the EU's competence in the field of environmental protection.

Neither the EU, nor its Member States, have taken a rights-based approach to regulating water, and do not tend to explicitly recognise access to water as a fundamental right.¹⁴⁵ It has been argued that the limited role of rights-based arguments in the EU regarding environmental factors – including access to water – is down to two reasons. First, it results from the 'silent' or 'invisible' rights in EU secondary law: reliance on rights

140 Water management legislation or cooperation also happens on an international level. In the context of droughts, the United Nations Convention to Combat Desertification (UNCCD) highlights the importance of international cooperation in conserving water resources. The Convention requires parties to "promote" collaboration among affected regions to address water scarcity and its broader environmental consequences, see Article 4 of UNCCD (1994).

141 Additional examples include, for instance, legislation in **Singapore** (Public Utilities Act, Environment Public Health Act, Sewerage, Drainage and Coastal Protection Act 1999, and Environmental Protection and Management Act); and **South Africa** (National Water Act 36 of 1998, Water Services Act 108 of 1997, National Environmental Management Act 107 of 1998, National Environmental Management: Waste Act 59 of 2008).

142 **United Kingdom** (Water (Special Measures) Act 2025); **Greece** (Law no. 5106 of 2024. Arrangements to address the multi-level impacts of climate change); **South Africa** (Climate Change Act 22 of 2024); **Singapore** (Coastal Protection and Other Amendments Act 2026). This recent legislation in Singapore granted the Public Utilities Board new responsibilities to protect water catchments from the effects of climate change and rising sea levels.

143 **European Union** (European Commission (2025a)) – see Box 1 below.

144 For example, Italy has developed an extensive body of legislation on water protection and pollution prevention, largely implementing EU law. The principal regulatory instrument is Legislative Decree No. 152/2006, as amended, commonly referred to as the Environmental Code. In relation to the interaction between water protection and economic activities, Italian law also requires ex ante assessment of the environmental impacts of certain plans, programmes and projects, including through the Strategic Environmental Assessment (*Valutazione Ambientale Strategica*, VAS), the Environmental Impact Assessment (*Valutazione di Impatto Ambientale*, VIA), and the Single Environmental Authorisation (*Autorizzazione Unica Ambientale*, AUA), with further protective measures adopted at regional level.

145 Satterthwaite (2021). With the exception of Belgium, Hungary and Slovenia.

arguments is often unnecessary because of clear, precise and unconditional statutory obligations protecting the environment, and thereby access to water. Second, the limitations on locus standi before the CJEU, in particular the restrictive standing requirements for actions for annulment by natural and legal persons under Article 263 (4) TFEU, means there are more limited possibilities for individuals to challenge EU acts directly before the EU courts and thereby to raise rights-related arguments.¹⁴⁶ In any case, all EU Member States are simultaneously members of the European Convention on Human Rights, and the right to access essential services, including water, has been recognised under the non-binding European Pillar of Social Rights.

The effectiveness of the EU's legislation in achieving protection of water in the EU has been mixed.¹⁴⁷ Despite the extensive legislation outlined below, the European Environment Agency has found that the overall quality of Europe's waters is not improving. In 2021, only 37% of surface water bodies in Europe were in good or high ecological status and 29% were in good chemical status. The lack of improvement reflects the continued combined pressures on surface waters, in particular pollution and habitat degradation, along with long-lived pollutants that are particularly challenging to remediate, such as mercury and brominated flame retardants.¹⁴⁸

The EU has recognised that further efforts to enhance the effectiveness of that legislation will be essential.

In 2021, the European Commission adopted the EU's Climate Adaptation Strategy.¹⁴⁹ It emphasised that ensuring that freshwater is available in a sustainable manner is fundamental for climate resilience, and announced a number of measures, including by raising the requirements for products subject to eco-design and energy labelling, energy production, housing and buildings, and agriculture. Moreover, the Union legislators have recently amended various directives in the fields of water policy, to update the list of pollutants affecting surface water and groundwater, including pesticides, pharmaceuticals and PFAS.¹⁵⁰

In 2025, the European Commission adopted a communication on a European Water Resilience Strategy, to outline its plans to ensure water resilience going forward.¹⁵¹ The communication refers to the need to revise the EU's Marine Framework Directive and Water Reuse Regulation; to enhance the implementation of the EU's Water Framework Directive, Flood Management Directive, and Nature Restoration Regulation; and to enhance enforcement of the Nitrates Directive.

However, the communication also signalled the need for efforts to 'simplify' some elements of its legislative framework. Further considerations on the interaction between simplification and deregulation on the one hand, and nature-related financial risks on the other, are outlined in section 5.2 below.

¹⁴⁶ Krommendijk (2025); Satterthwaite (2021).

¹⁴⁷ Puharinen (2021), Stupazzini (2024).

¹⁴⁸ EEA (2024a).

¹⁴⁹ European Commission (2021).

¹⁵⁰ Directive (EU) 2026/805 of the European Parliament and of the Council of 30 March 2026 amending Directive 2000/60/EC establishing a framework for Community action in the field of water policy, Directive 2006/118/EC on the protection of groundwater against pollution and deterioration and Directive 2008/105/EC on environmental quality standards in the field of water policy.

¹⁵¹ European Commission (2025a).

Box 1

Overview of key pieces of EU legislation on water management and pollution prevention

Water Framework Directive (Directive 2000/60/EC)

The Water Framework Directive requires EU Member States to implement an integrated water management system with the aim of preventing deterioration of Europe's inland surface waters and groundwater. The Directive requires Member States to establish a programme of measures for each river basin district to ensure 'good status' of European water bodies. These measures must be included in river basin management plans which must be established and reported to the European Commission every six years. Each programme of measures must include basic measures to control different types of water abstraction, impoundment, point source discharge, diffuse sources liable to cause pollution, and any other significant adverse impacts on water quality.

The Directive was first adopted in 2000, and initially set a deadline of 2015 for Member States to achieve 'good status' of European water bodies. That deadline has passed, and extensions have been granted until 2027.

The Water Framework Directive has been subject to significant litigation before the Court of Justice of the European Union (CJEU). The European Commission has taken 20 successful cases against 9 Member States¹ arising from their failure to fulfil their obligations under the Directive. The European Commission initiated further cases against three additional Member States² as recently as 2024.³

Drinking Water Directive (Directive (EU) 2020/2184)

The Drinking Water Directive aims to protect human health against the harmful effects of contaminated drinking water. The Directive was first adopted in 1998 and recast in 2020. The European Commission recently opened infringement procedures against three Member States for failing to correctly transpose the Directive.⁴

Urban Waste-Water Treatment Directive (Council Directive 91/271/EEC)

The Directive aims to protect people's health and the environment by requiring that urban waste water is collected and treated before discharge into the environment. Towns and cities are required to put in place the necessary infrastructure to collect and treat their urban waste water. The Commission has initiated as many as 98 infringement procedures against 25 Member States for reasons including incorrect application or failure to correctly transpose the Directive.⁵

Water Reuse Regulation (Regulation (EU) 2020/741)

The Regulation aims to encourage and facilitate water reuse in the EU by laying down minimum requirements for water quality and monitoring as well as risk management provisions for assessing and addressing the potential health risks and environmental risks.

.../...

1 Belgium, Denmark, Greece, Italy, Luxembourg, Malta, Poland, Portugal, Spain.

2 Austria, Netherlands, Slovenia.

3 European Commission (2024), [July infringement package: key decisions](#), Press Release, 25 July.

4 European Commission (2025a), [July infringements package: key decisions](#), Press Release, 17 July.

5 Austria, Belgium, Bulgaria, Cyprus, Czechia, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Slovakia, Slovenia, Spain, Sweden, Romania, Poland, Portugal.

EU EQS Directive (Directive 2008/105/EC)

The Environmental Quality Standards (EQS) Directive sets out standards for priority substances and certain other pollutants in surface waters, to support the objectives of the Water Framework Directive. In particular, the EQS Directive sets maximum allowable concentrations and annual average values for those substances, requires Member States to monitor compliance with these limits, and requires Member States to control emissions and discharges, and take measures where standards are exceeded. The latest infringement procedure under the Directive was initiated in 2021, focusing on the incorrect transposition of the Directive.⁶

Groundwater Directive (2006/118/EC)

The Groundwater Directive provides detailed procedures for meeting the Water Framework Directive's environmental objectives for groundwater quality. The measures include criteria for the assessment of good groundwater chemical status and requiring actions to be taken to prevent or limit the input of pollutants into groundwater. To date, the Commission has initiated infringement cases against 23 Member States concerning this Directive.⁷

6 European Commission (2021), [September infringements package: key decisions](#), Press Release, 23 September.

7 Austria, Belgium, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Malta, Poland, Portugal, Slovakia, Slovenia, Spain, (United Kingdom).

8 Belgium, Bulgaria, Estonia, France, Italy, Latvia, Luxembourg, Slovakia, Spain, United Kingdom.

9 European Commission (2023), [February infringements package: key decisions](#), Press Release, 15 February.

10 European Commission (2025a), [May infringements package: key decisions](#), Press Release, 7 May.

Nitrates Directive (Council Directive 91/676/EEC)

The Directive aims to protect surface and ground waters against nitrates pollution from agricultural sources. The Nitrates Directive requires EU Member States, among other measures, to monitor water quality and identify areas that drain into polluted waters or are at risk of pollution. The Directive has led to the initiation of cases against eleven Member States,⁸ with the most recent formal notice issued in 2023.⁹

Industrial Emissions Directive (2010/75/EU)

The Directive is aimed at minimising the impact of pollution on human health and the environment by reducing harmful industrial and intensive livestock emissions. The Directive was amended in 2024 to strengthen its provisions, expand its scope and emphasise the adoption of innovative technologies and best available techniques (BAT) to further reduce pollution. As recently as May 2025, the Commission has sent an additional letter of formal notice in connection with a Member State's failure to fully and correctly transpose the Directive.¹⁰

5.2 Simplification, deregulation and nature-related financial risks

Over the past two years, there have been calls for efforts to simplify the EU's regulatory framework.¹⁵²

Various omnibus simplification packages have been proposed by the European Commission and are under

discussion by the Union legislators. First, the Commission proposals to amend the EU's corporate sustainability reporting and due diligence frameworks were adopted in February 2026.¹⁵³ These amendments do not alter substantive water-related obligations or targets, but rather reduce reporting requirements. However, the reduction of reporting requirements are not without consequence, as this

152 Also outside the EU and on a national level, there have been decisions to roll-back or reduce the level of ambition of existing biodiversity protection to boost the economy, see Fenn (2025).

153 Directive (EU) 2026/470 of the European Parliament and of the Council of 24 February 2026 amending Directives 2006/43/EC, 2013/34/EU, (EU) 2022/2464 and (EU) 2024/1760 as regards certain corporate sustainability reporting requirements and certain corporate sustainability due diligence requirements, OJ L, 2026/470, 26.2.2026.

reduction will weaken monitoring, and limit the assessment of water-related financial risks.¹⁵⁴ Second, in December 2025 the European Commission published a package of measures to simplify environmental legislation (the Environmental Simplification Package),¹⁵⁵ and a Communication on the EU's critical raw material strategy.¹⁵⁶ As part of the Communication, the European Commission announced that it plans to review the Water Framework Directive in 2026, paying particular attention to simplification and the need to address potential bottlenecks, in order to promote circularity and access to critical raw materials in the EU, while protecting the environment and human health.¹⁵⁷

The objective of such simplification is to reduce the regulatory burden on companies, and thereby support economic growth.¹⁵⁸ However, it is important that such simplification efforts strike the right balance to ensure that the benefits of such legislation for the economy and for the financial system are retained while ensuring that the framework is proportionate. It is essential to ensure that the goal of simplification should be to make regulations more efficient without compromising their effectiveness. Scholars have argued – and criticised – that in the omnibus packages presented in late 2025, there have been examples of such ‘deregulation’ of core regulatory obligations (e.g. scope, nature of obligations) under the umbrella of simplification.¹⁵⁹ In the context the upcoming review of the Water Framework Directive, various stakeholder point out that the potential ‘deregulation’ of these frameworks could unintentionally harm the very businesses it aims to support.¹⁶⁰

Three key considerations are worth noting when it comes to the simplification of legislation addressing water management and pollution prevention.

First, robust legislation, coupled with effective enforcement, is essential to mitigate physical risks resulting in water scarcity in the medium- to long-term.

This is particularly relevant, given the causes of water scarcity include factors such as agricultural and industrial pollution, along with over-extraction caused by demand from agriculture, industry and energy production. As noted above, physical risk can have a significant impact on the economy and the financial system. Thus, it is important that policymakers take into account the broader economic benefits of mitigating these physical risks, and consider the significant limitations and costs associated with adaptation – especially in view of the costs of developing additional water supply infrastructure or obtaining water outside the hydrological cycle.

Second, it is worth recalling that transition risk is most problematic for the economy and the financial sector when the process of adjustment is too steep.¹⁶¹

There are considerable benefits to adopting (or retaining) appropriate policy and regulatory measures at an early stage, thereby ensuring an orderly transition. Simplification may exacerbate transition risk if this results in a need for much more rapid adjustment by companies later. It also risks creating legal uncertainty and penalising companies that have invested in water efficiency and pollution control measures, or innovative solutions. It thereby gives an unfair competitive advantage to companies who have not undertaken such investment or preparations, which will become vulnerable at a later stage. It is thus important to ensure that simplification does not prove more costly to companies and to the economy and financial system over the medium- to long-term.

154 Water Europe (2025).

155 European Commission (2025b), Press Release, 10 December.

156 European Commission (2025c).

157 Ibid.

158 European Commission (2025b), Press Release, 10 December. See also, xxx.

159 Alemanno (2025).

160 In a recent public letter, the European association of public water operators and seven European organisations, urge the European Commission to carefully assess the potential unintended economic and operational consequences of altering key principles, such as quality objectives and protection standards. The letter points out that lower raw water quality could substantially increase treatment costs, which may be passed on to consumers and businesses, including SMEs, or even result in the closure of certain activities. See Aqua Publica Europea (2026).

161 NGFS (2022b); NGFS (2022c).

Third, in the context of regional arrangements, such as the European Union, it is important to avoid the risk of fragmentation, thereby undermining cross-border economic activities. The EU has adopted harmonised legislation across its 27 Member States, thereby creating a single market, and enabling companies to operate smoothly cross-border. Where EU legislation is amended or simplified, individual Member States

may be compelled to adopt more stringent national legislation to address water scarcity, based on their unique geographic location, economic or environmental circumstances, public pressure or citizens' movements. This could impact companies operating in multiple EU jurisdictions, who may have to have different processes in place to comply with different requirements in different jurisdictions.

6. Conclusion

Water scarcity represents a significant nature-related financial risk with far-reaching legal, economic, and financial implications. Water scarcity may be caused by several different factors, or a combination of factors, including climate change, poor infrastructure, pollution, and demand from agriculture, industry, urban development and new technologies. Each of these factors will be linked to different legal aspects, including public policy and legislation; enforcement; investment; and litigation.

Water scarcity poses substantial risks to economies and financial systems. Severe drought scenarios could lead to significant output losses across sectors such as agriculture, manufacturing, mining, and energy production, with cascading effects on inflation and financial stability. Financial institutions may be exposed to these risks through loans, sovereign debt, and insurance claims, necessitating enhanced disclosure standards, scenario analyses, and risk management tools.

The legal implications of water scarcity are multifaceted, encompassing human rights considerations, litigation risk, and water management and pollution prevention legislation.

First, several international and regional human rights treaties, along with national legal frameworks, recognise the human 'right to water'. This right may be expected to develop further in the wake of recent rulings of international and regional courts on the link between climate change and human rights. Citizens movements may place further pressure on jurisdictions to recognise and take action on the right to water, leading to the further development of law and policy.

Second, litigation risk is growing, with a large number of cases challenging authorisations and development plans, including using rights-based arguments. Such litigation risk drives transition risk, as states and public authorities may need to adopt ambitious climate adaptation policies, to ensure their citizens' fundamental rights are respected. Moreover, such litigation can pose an immediate and direct risk to financial and non-financial institutions with a financial interest in such projects. Projects may be delayed or made more costly, or even be blocked altogether, potentially resulting in financial losses and stranded assets.

Third, most jurisdictions have in place some form of water management and/or pollution prevention legislation – which may be subject to significant change. This reflects the fact that water is a limited and valuable resource, which is essential for society and the economy. As states develop and adopt climate adaptation measures, and as litigation risk increases, States will need to consider the effectiveness of water management and pollution prevention legislation and may need to strengthen that legislation, and ensure its enforcement, to address water scarcity. This is likely to lead to transition risk: these measures may increase the costs of private actors or limit certain economic activities that can impact water scarcity. In particular, sudden policy changes can create transition risks affecting corporations, which may be transmitted to the financial sector. However, it is worth noting that in the short term, states may also be subject to calls for simplification, to reduce regulatory burden on the private sector. In that context, it will be essential for states to find a balance between the short- and the long-term interests of economic actors, and to provide legal certainty for financial and non-financial institutions in their jurisdictions.

Annex : Global cases challenging project authorisations and licences concerning water scarcity

Table of global cases challenging project authorisations and licences concerning water scarcity (excluding cases in the United States)¹

Jurisdiction	Case	Status	Plaintiff	Defendant(s)	Details	Legal basis
Argentina	<u>OIKOS Red Ambiental v. Mendoza Province</u>	2018, pending	NGO	• State	• Fracking licence • Water scarcity • Water pollution • Climate change	• Constitutional rights • Environmental laws
Australia	<u>Nature Conservation Council of NSW v. Minister for Water, Property and Housing</u>	2021, pending	NGO	• State	• River water sharing plan • Climate change	• Environmental laws
Australia	<u>Whitehaven Coal Pty Ltd v. Australian Conservation Foundation & Ors</u>	2024, pending	NGO	• State • Private company	• Mining licence (coal) • Water pollution • Climate change	• Environmental laws
Brazil	<u>Arayara Association of Education and Culture v. Copelmi Mineração Ltda. and FEPAM</u>	2020, decided (discontinued)	NGO	• State	• Mining licence (coal) • Water pollution • Climate change	• Environmental laws
Brazil	<u>Instituto Internacional Arayara v. IBAMA and others</u>	2022, pending	NGO	• State • Private companies	• Thermoelectric project licences • Water scarcity • Climate change	• Environmental laws
Brazil	<u>Instituto Verdeluz and others v. Portocem Geração de Energia S.A. and SEMACE</u>	2022, pending	NGO Indigenous communities	• State • Private company	• Thermoelectric project licences • Water scarcity • Climate change	• Environmental laws
Brazil	<u>Duda Salabert Rosa vs. Minas Gerais State and Taquaril Mineração S.A.</u>	2022, pending	Citizen	• Federal state • Private companies	• Mining licence (iron ore) • Water pollution • Climate change	• Environmental laws
Chile	<u>Municipality of Cerrillos (Google Data Center) v/ Evaluation Commission of the Metropolitan Region</u>	2024, decided (successful)	Citizens Municipality	• State	• Data centre approval • Climate change	• Environmental laws
Chile	<u>Astorga and Others vs. Environmental Assessment Service (SEA)</u>	2024, decided (unsuccessful)	Citizens	• State	• Approval of bridge (regional industrial development) • Water scarcity • Climate change	• Environmental laws
Chile	<u>Regional Government of Atacama v Ministry of Mining and Other</u>	2022, decided (successful)	Regional government	• State	• Mining tender (lithium) • Water scarcity	• Environmental laws
Chile	<u>Jara Alarcon Luis v. Environmental Assessment Service</u>	2019, decided (partly successful)	Citizens	• State	• Mining licence • Water scarcity • Climate change	• Environmental laws

¹ Monitoring has taken place on the basis of reporting by the members of the NGFS, along with research using the Climate Change Litigation databases of the Sabin Center for Climate Change Law (Columbia University). The distinction between US and non-US (Global) cases used in this report follows from the design of the Sabin Center's Climate Litigation databases, which originally had separate databases for US and non-US (global) cases respectively, also in view of the large volume of US cases.

Jurisdiction	Case	Status	Plaintiff	Defendant(s)	Details	Legal basis
Chile	<u>Modatima et al v. Environmental Assessment Agency (SEA)</u>	2024, pending	NGO	• State	• Mining licence (copper and molybdenum) • Water scarcity • Climate change	• Environmental laws • Constitutional rights
Colombia	<u>Decision SU-698/17</u>	2017, decided (successful)	Indigenous communities	• State authorities • Private companies	• Mining licence • Diversion of river • Climate change	• Constitutional rights
Colombia	<u>Decision C-035/16</u>	2016, decided (successful)	Citizen	• State legislator	• National development plan • Sensitive, high-altitude ecosystems (páramos) • Grandfathering agricultural, mining, and oil and gas licences • Climate change	• Constitutional rights
Colombia	<u>Atrato River Decision T-622/16</u>	2016, decided (successful)	Indigenous communities	• State	• Illegal mining • River pollution • Climate change	• Constitutional rights • River as subject of rights
Colombia	<u>Combeima River case of September 14, 2020</u>	2020, decided (partially successful)	Citizen	• State • Private companies • Individuals	• Mining licence • River pollution • Climate change	• Constitutional right to water • River as subject of rights
Colombia	<u>Wayúu Indigenous community and others v. Ministry of Environment and others</u>	2019, pending	Indigenous communities	• State	• Mining licence (coal) • Climate change	• Environmental licencing process
France	<u>Eau de Paris v. Bridge Energies and the Prefect of Seine-et-Marne</u>	2025, pending	Public utility company	• Municipality • Private company	• Mining licence (hydrocarbons) • Water scarcity • Water pollution • Climate change	• Environmental laws
Germany	<u>Nassauskiesungsbeschluss, BvL 77/78</u>	1981, decided	Private company	• State	• Gravel extraction permit • Groundwater protection • Access to drinking water	• Environmental law
Namibia	<u>Ncumcara Community Forest Management Association v The Environmental Commissioner</u>	2022, decided (unsuccessful)	NGO	• State	• Oil drilling licence • Water scarcity • Water pollution • Climate change	• Constitutional rights • Environmental law
Nigeria	<u>Centre for Oil Pollution Watch (COPW) Vs NNPC</u>	2018, decided (successful)	NGO	• Public entity	• Oil drilling • Water pollution	• Constitutional rights
Pakistan	<u>Ali v. Federation of Pakistan</u>	2016, pending	Citizen	• State	• Mining licence (coal) • Water pollution	• Constitutional rights

Jurisdiction	Case	Status	Plaintiff	Defendant(s)	Details	Legal basis
Pakistan	<u>D. G. Khan Cement Company v. Government of Punjab</u>	2021, decided	Private company	• Federal state	• Cement producer (licence) • Water scarcity • Climate change	• Constitutional rights • Environmental law
Romania	<u>Mihaileni Dam Project</u>	2023, decided (successful)	NGO	• State	• Dam construction • Water quality • Climate change	• Environmental law
Romania	<u>Declic v Hunedoara Environmental Protection Agency and Samax Romania</u>	2023, decided (successful)	NGO	• State • Private company	• Mining licence (copper, gold) • Transboundary underground and surface watercourses • Climate change	• Environmental law • International law (transboundary impact assessment)
Romania	<u>Tătar v Romania</u> (ECtHR)	2009, decided (successful)	Citizen	• State	• Mining (gold, silver); cyanide leakage • Water pollution	• European Convention on Human Rights
South Africa	<u>Philippi Horticultural Area Food & Farming Campaign, et al. v. MEC for Local Government, Environmental Affairs and Development Planning: Western Cape, et al.</u>	2020, decided (successful)	NGO	• State	• Urban development • Water scarcity • Threats to a local aquifer	• Environmental law
Turkey	<u>Diyarbakir Bar Association & Ecology Association vs. Diyarbakir Governorship</u>	2024, pending	NGO	• Local government	• Oil drilling • Water pollution • Climate change	• Environmental law
Turkey	<u>Nature Association and Others v. Manisa Governorship and Others</u>	2022, decided (successful)	NGO	• Local government	• Agriculture • Lake basin • Water pollution	• Environmental law
United Kingdom	<u>Foxglove and Global Action Plan v. Secretary of State for Housing, Communities and Local Government</u>	2025, pending	NGO	• State	• Data centre • Water scarcity • Climate change	• Environmental law

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