



Brussels, 4.6.2025
C(2025) 3580 final

COMMISSION RECOMMENDATION
of 4.6.2025
on guiding principles of water efficiency first

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 292 thereof,

Whereas:

- (1) Due to unsustainable water management practices, pollution and growing demand, water quality and quantity as well as the health of aquatic ecosystems in the Union are not improving at the pace they should. Climate change and biodiversity loss are exacerbating this trend. Water constraints increasingly affect society and the economy. In this context, increased water efficiency becomes a bare necessity.
- (2) The Commission report to the Council and the European Parliament¹ which presents the progress on the implementation of Directive 2000/60/EC of the European Parliament and of the Council² and Directive 2007/60/EC of the European Parliament and of the Council³ confirms that most Member States perceive water scarcity as a growing concern. Water scarcity occurs in about 34% of the Union's territory and affects about 40% of the Union's population during at least one season in a year⁴. Water scarcity is caused by a combination of overexploitation and climate impacts⁵. The European Parliament called for action on these matters.⁶
- (3) Droughts affect on average 4% of the Union's territory every year. In southern and south-western Europe, river discharge during summer could decline by up to 40%, under a 3 °C temperature rise scenario. Over the last decades, they have increased in number and intensity in Europe. The severe drought and heat events in 2022, for instance, caused an estimated EUR 40 billion of economic losses with the largest losses recorded in Italy, Spain and France.⁷
- (4) Ongoing climate change is expected to make the problem worse, as the impacts and frequency of droughts increase. The combined impact of structural overconsumption

¹ Report from the Commission to the Council and the European Parliament on the implementation of the Water Framework Directive (2000/60/EC) and the Floods Directive (2007/60/EC) (Third river basin management plans Second flood risk management plans), COM(2025) 2 final.

² Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1, ELI: <http://data.europa.eu/eli/dir/2000/60/oj>).

³ Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks (OJ L 288, 6.11.2007, p. 27, ELI: <http://data.europa.eu/eli/dir/2007/60/oj>).

⁴ See EEA Water Scarcity Conditions in Europe, available [here](#). It is assumed that a WEI+ indicator for water resources above 20% suggests a situation of water scarcity.

⁵ EEA, Water Resources Across Europe, 2021, available [here](#).

⁶ European Parliament resolution of 7 May 2025 on the European Water Resilience Strategy (2024/2104(INI)).

⁷ European Climate Risk Assessment, [EEA Report 01/2024](#), page 209 with further references.

and increased risk of prolonged droughts pose risks to water security, drinking water supply, agriculture, inland navigation, tourism and power supply⁸. Water scarcity across sectors and loss in agricultural production due to combined heat and drought belong to the top key risks from climate change in Europe⁹.

- (5) Freshwater abstraction per year has decreased, with geographical differences, by 19% between 2000 and 2022¹⁰, however abstractions of freshwater per capita are expected to increase again. This is because: (i) the progress on water efficiency in the most consumption intensive sectors such as energy and agriculture, including bioenergy is insufficient; (ii) industrial and digital transformation require more freshwater; and (iii) mismanagement, pollution and climate change are exerting increasing pressures on the availability of clean freshwater for socio-economic purposes. This harms the ecological flows essential to safeguard the water ecosystem, and the competitiveness of the Union's economy which needs clean freshwater as much as it needs clean energy.
- (6) The European Central Bank estimates that up to 60% of outstanding credit risks in the euro area could suffer some exposure to water scarcity and heat stress, and 20% to floods.¹¹ Moreover, as water-related climate risks intensify, the insurance gap could increase,¹² making economic recovery after water related incidents like droughts or floods more difficult.
- (7) Investing in water efficiency will contribute to providing sufficient water to key economic sectors that are critical for the Union's strategic autonomy and has hence potential to enhance competitiveness, as recognised in the Clean Industrial Deal¹³. Harnessing water saving potential will also create business opportunities and cost savings for consumers. The Union's industry is already a global front runner in developing water technologies.
- (8) The 2025 Competitiveness Compass¹⁴ calls upon Member States to address growing water scarcity by improving water management practices and infrastructures, increasing water efficiency and promoting sustainable water use. The Joint Communication on the European Preparedness Union strategy¹⁵ stresses the need to strengthen access to critical resources across the Union, such as water, for example for emergency and disaster response.

⁸ The European Climate Risk Assessment (2024), chapter 5 and chapter 11, which also contains more information on the expected rise of prolonged droughts (including megadroughts) in Europe.

⁹ Intergovernmental Panel on Climate Change, Sixth Assessment report. <https://www.ipcc.ch/assessment-report/ar6/>

¹⁰ EEA (2024), Water abstraction by source and economic sector in Europe, available at <https://www.eea.europa.eu/en/analysis/indicators/water-abstraction-by-source-and>

¹¹ European Central Bank, Climate-related risks to financial stability, Chart B.2?

¹² European Central Bank, The Climate Insurance Protection Gap, based on EIOPA data, available [here](#).

¹³ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "The Clean Industrial Deal: A joint roadmap for competitiveness and decarbonisation", COM(2025)85 final.

¹⁴ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions "A Competitiveness Compass for the EU", COM(2025) 30 final.

¹⁵ Joint Communication to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions "on the European Preparedness Union Strategy", JOIN(2025) 130 final.

- (9) The interdependence between water and energy resources is a critical factor in ensuring the security and resilience of the Union's water and energy systems.
- (10) The Union is obliged to act on water efficiency based on European and international rules such as the United Nations Convention on the Protection and Use of Transboundary Watercourses and International Lakes signed on 17 March 1992 in Helsinki, Article 7 of the Paris Agreement signed on 12 December 2015 in Paris, Article 5 of Regulation (EU) 2021/1119 of the European Parliament and of the Council¹⁶ as well as the European Union's commitments under the UN Water Action Agenda¹⁷. Target 6.4 of the UN Sustainable Development Goals also obliges Parties to substantially increase water-use efficiency across all sectors already by 2030.
- (11) The European Green Deal¹⁸ launched a concerted strategy for an increasingly climate-neutral, toxic-free, resource-efficient and competitive economy, where economic growth is decoupled from resource consumption, as a response to climate and environmental-related challenges.
- (12) The Union strategy on adaptation to climate change,¹⁹ the European climate risk assessment and the Communication on managing climate risks give an overview of the vast range of impacts from climate risks and the necessity to take action as policy and measures taken do not keep up with the pace of climate change. Dealing with water scarcity and droughts is one of the fields where action is needed. It is underlined that ensuring freshwater availability in a sustainable manner is fundamental for climate resilience.
- (13) Water shortages have a very strong impact on the health of marine ecosystems and the viability of the social and economic activities of coastal and island communities that depend on them. Managing fresh and marine waters in an integrated, efficient manner is thus a necessity.
- (14) The circular economy action plan²⁰ provides an agenda to advance towards keeping resource consumption within planetary boundaries, including water. In line with this objective, promoting the safe reuse of water in different sectors can unlock economic potential in water-stressed regions. It can also reduce the need for expensive infrastructure projects like new reservoirs or desalination plants, leading to long-term savings and improved business resilience to water shortages, as well as to reduced operational risks.

¹⁶ Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') (OJ L 243, 9.7.2021, p. 1, ELI: <http://data.europa.eu/eli/reg/2021/1119/oj>).

¹⁷ <https://data.consilium.europa.eu/doc/document/ST-7443-2023-INIT/en/pdf>

¹⁸ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions "The European Green Deal", COM(2019) 640 final.

¹⁹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "Forging a climate-resilient Europe – the new EU Strategy on Adaptation to Climate Change", COM(2021) 82 final.

²⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "A new Circular Economy Action Plan For a cleaner and more competitive Europe", COM(2020) 98 final.

- (15) Regulation (EU) 2024/1781 of the European Parliament and of the Council²¹ enables the setting up of ecodesign requirements that products have to comply with to improve a series of aspects, including water use and water efficiency, for almost all categories of physical products. The elements of this Recommendation will contribute to its implementation.
- (16) This Recommendation provides guidance on elements which are not addressed in a comprehensive way in the Union water legislation: Directives 2000/60/EC, (EU) 2020/2184²², (EU) 2024/3019²³, (EU) 2024/1785²⁴ of the European Parliament and of the Council and Regulation (EU) 2020/741 of the European Parliament and of the Council²⁵.
- (17) To promote water efficiency, it is appropriate to define a set of principles and recommendations that should form the basis for future Union and Member State actions to secure a more systematic consideration of the water saving potential in decision-making, and a more responsible use of water in all sectors.
- (18) The principle of water efficiency first aims to ensure long-term sustainability of water consumption, bearing in mind that natural freshwater resources are finite and will be further reduced due to increasing global warming. Measures to increase water efficiency should build on a cost-benefit analysis including economic, environmental and societal externalities, while also considering subsidiarity, proportionality, fairness and equity.
- (19) To accelerate the application of the principle of water efficiency first and to promote a large-scale deployment of water efficient measures, it is necessary to establish guiding objectives. For that reason, Member States should be encouraged to set their own targets for water efficiency, based on their national circumstances.
- (20) The implementation of the water efficiency principle should make best use of new technologies such as digital smart meters and sensors for detecting and managing leaks, including from drinking water infrastructure, as required under Article 4(3) of Directive 2020/2184.
- (21) Where measures to increase water efficiency need to be sequenced to resource constraints, priority should be given to those sectors consuming the most water or sectors with the highest water saving potential and following an assessment of the trade-offs, especially in relation to strategic sectors, while also respecting the water

²¹ Regulation (EU) 2024/1781 of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC (OJ L, 2024/1781, 28.6.2024, ELI: <http://data.europa.eu/eli/reg/2024/1781/oj>).

²² 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 (OJ L 435 of 23.12.2020, p. 1, ELI: <http://data.europa.eu/eli/dir/2020/2184/oj>).

²³ Directive (EU) 2024/3019 of the European Parliament and of the Council of 27 November 2024 concerning urban wastewater treatment (OJ L, 2024/3019, 12.12.2024, ELI: <http://data.europa.eu/eli/dir/2024/3019/oj>).

²⁴ Directive (EU) 2024/1785 of the European Parliament and of the Council of 24 April 2024 amending Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control) and Council Directive 1999/31/EC on the landfill of waste (OJ L, 2024/1785, 15.7.2024, ELI: <http://data.europa.eu/eli/dir/2024/1785/oj>).

²⁵ 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, ELI: <http://data.europa.eu/eli/reg/2020/741/oj>).

hierarchy. Those sectors will necessarily differ from one river basin to another and from one aquifer to the other.

- (22) Water efficiency measures should be embedded in the programmes of measures of river basin management plans. These measures can lead to water saving and the desired progress towards water resilience only if they are part of a comprehensive approach. Accompanying governance measures and the use of economic instruments can turn water efficiency gains into lasting improvements of the water balance by avoiding rebound effects. Water efficiency strategies should always be consistent with national climate adaptation strategies.

RECOMMENDS AS FOLLOWS:

Principle of water efficiency first

- (1) Member States are encouraged to apply the principle of water efficiency first, taking into account economic, social and environmental considerations, when adopting national measures affecting water management.
- (2) “Water efficiency first” means taking all necessary measures to reduce water demand as a priority above the exploitation of additional water resources. In declining order of priority, consumption should be reduced first, followed by measures to increase efficiency, followed by the reuse of wastewater and the expansion of water supply.
- (3) In view of the potential for water savings, the EU should aim to enhance water efficiency by at least 10% until 2030. Member States are encouraged to set their own targets for water efficiency, based on their national circumstances. The Commission will work with Member States and stakeholders to develop a joint methodology for water efficiency targets, taking into account territorial and other differences between countries, regions and sectors.

Efficient water resources management

- (4) It is recommended that Member States apply water management practices set out in the Annex which, in particular, build on the water balance of a river basin and on reliable projections of environmental and socio-economic water needs. These practices should also build on the assessment of climate change impacts and vulnerability assessments based on the relevant climate change scenarios, and their impacts on civil security. These practices should build upon effective and regular controls of water abstractions, adaptable permitting procedures, strong support for research and innovation, and fully use of advanced digital tools.
- (5) It is recommended that Member States promote efficiency at all levels of the water supply chain, namely storage, conveyance and water use, as set out in the Annex, and secure the necessary investments.
- (6) It is recommended that Member States apply the principle of water efficiency first, where possible, across all water using sectors, including agriculture, energy, industry, commerce, the public water supply sector, and the digital economy, at all levels of planning and permitting for water management.

Governance

- (7) It is recommended that Member States ensure appropriate governance for water management by ensuring in particular transparent, secure, inclusive, fair and predictable mechanisms for water allocation, providing certainty on allocation priorities between categories of uses in case of scarcity, while safeguarding vulnerable and marginalised groups' access to affordable drinking water and water for sanitation.

Training and awareness raising

- (8) It is recommended that Member States invest in skills and human resources to ensure effective and efficient water management at all levels.
- (9) It is recommended that Member States take actions to raise citizens', local authorities and businesses' awareness of the principle of water efficiency first. Such actions should be repeated at regular intervals.

Transboundary cooperation and international dimension

- (10) Member States should ensure full transboundary cooperation on quantitative aspects of water management for all river basins, including through the mechanisms set out in Directive 2000/60/EC and relevant international cooperation mechanisms and bodies.
- (11) It is recommended that Member States promote the principle of water efficiency first also at international level such as UN-Water, UNEP, G7 and G20, the OECD, the UNFCCC, the UNCCD, the CBD, FAO and strengthen their engagement with financial institutions such as the European Investment Bank, the European Bank for Reconstruction and Development and the World Bank, as well as the private sector to crowd-in long term investments into water efficiency initiatives.

Done at Brussels, 4.6.2025

For the Commission
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