

A NEW EUROPEAN BLUE DEAL

Policy recommendations for the next European Commission

EXECUTIVE SUMMARY

The EU is not equipped for future protection and use of the water resource. Today, citizens and businesses in certain parts of Europe are experiencing new, severe drought situations, while in other parts they are experiencing too much water and floods. Both scenarios are a result of changed rainfall patterns, where large and rapid changes have occurred over a short number of years. Action is needed as water is a crucial resource for a number of uses. National efforts to protect are not sufficient and, paradoxically, EU protection rules are very rigid and create barriers instead of flexible frameworks regarding the use of the water resource. The legislation on drinking water, the water framework, urban wastewater, water recycling and industrial emissions should work better together to both protect water and at the same time create the necessary setup for usage.

POLICY RECOMMENDATIONS – IN SHORT

1

REDUCE WATER DEMANDS

- Enhance water efficiency first principle
- Expand information on water usage to support public engagement
- Ensure water prices reflect the real value of water
- Include water efficiency innovations in the INCITE initiative
- Promote the water-energy nexus principle across the EU
- EU should foster the reuse of water

2

STRATEGIC APPROACH TO WATER SUPPLY AND RESOURCES

- Prepare a coherent European plan to avoid water scarcity
- Water abstraction should be based on the best available resource
- Allow 'progressive protection schemes' of water resources
- Set ambitious targets for reducing non-revenue water

3

CIRCULAR AND REGENERATIVE APPROACHES TO WASTEWATER TREATMENT

- Present a framework for harvesting critical resources from wastewater
- Present a strategy to avoid hazardous substances in water discharge
- Share best practices on solutions for overflow

4

CONDITIONS FOR A EUROPEAN BLUE DEAL

- Digitalize water management, cycles and utilities
- Target funding for critical water infrastructure
- EU must be a global water steward

THE CHALLENGE?

We live in a time where security of supply is a prerequisite for our economic robustness, safety and competitiveness in the EU. A robust and secure supply of water is a key pillar of European prosperity. Water is a crucial resource for European citizens, societies, economies and industrial activities in Europe, such as food production and processing, manufacturing of pharmaceuticals and other industrial products, energy production with existing non-fossil methods and new energy-supplying techniques as the electrolysis-based Power-to-X as well as activities to support self-sufficiency of critical raw materials such e.g. mining. Furthermore, a more sustainable approach to wastewater is required to harvest critical resources such as fertilizing agents, energy and the water itself. At the same time water is a vital resource for human life for hygiene, health, and nutritional needs. And while harvesting water for basic living standards and growth, we must also protect our nature, support biodiversity, recreation and regenerative growth. Together, global water use, storage and distribution – and the lack of

wastewater treatment - contributes 10 per cent of global greenhouse gas emissions, making it key to the net-zero transition.

In recent years, European citizens and local communities have encountered water-related challenges such as floodings, heavy rainfalls, drought, water scarcity and increased pollutants detected in water eco-systems. In some regions a permanent change towards water scarcity is observed, while in other regions the saturation changes from year to year. The changing climate introduces a heightened risk of water scarcity or heavy rainfalls, both of which are already evident today. In addition, there is an increasing gap of investments in water infrastructure. Together, this will affect citizens, local communities, as well as businesses.

Water is critical at local, European, and global level. Therefore, the EU must lead the water agenda and be the global water steward with a New European Blue Deal.

RISKS IF WE DO NOT ADDRESS THE CHALLENGE

We need to establish a coherent water resource strategy to show the path towards a more water-smart Europe. We will miss innovative contributions from industry into water use, water efficiency, and water reuse. Agriculture and its underlying supply chains will struggle to secure water for crop and food production. Water resources for our growing cities and urban regions will face restricted allocations. Cost for abstraction and treatment of water will rise. In end a disintegrated approach to water in the EU, as the one we have today, will lead to decreased access to critical water resources and thus decrease European competitiveness. More critically, it will result in water poverty across our society.

Danish Industry's specific policy recommendations for a new European Blue Deal:



THE EU MUST PRESENT A NEW EUROPEAN BLUE DEAL AND SUPPORT IMPLEMENTATION OF EU LEGISLATION

To protect, utilize and share the water resource in the EU, we need a cross-cutting water resource strategy, that connects sectors in a collaborative effort to ensure availability and sustainable management of water for all. All stakeholders must contribute to a water strategy for our water resources in Europe. The comprehensive water strategy should include several parallel, but interlinked tracks addressing the water resource in a better and more integrated management approach. It should build on the use and benefits of water, the protection of water and sharing the resource with fair access to the resource.

To assist member states in their implementation, the Commission should support the dissemination of technical knowledge and best-practices on national

legislative processes. This will help member states converge in their implementing acts and enter into updated technical, digital and behavioural management into guidelines and regulation of the water sector. Specific legislation to be supported includes Urban Waste Water Treatment Directive, Drinking Water Directive and Industrial Emissions Directive.

A package for a New European Blue deal: Part of the water framework directive should be updated to support a cross-sectoral water strategy across existing and upcoming European legislation. The cross-sectoral strategy should cover the entire water cycle to address 1) water supply and resources; 2) water distribution, demand and usage; 3) wastewater treatment; and 4) support digitalization and funding as levers.

C1

REDUCE WATER DEMANDS

1A

ENHANCE WATER EFFICIENCY FIRST PRINCIPLE

With increasing water scarcity issues, the European Commission should enhance the principle of water efficiency first and reduce water usage and demands where possible. Solutions, technologies, and innovations already exist to reduce water consumption for citizens, households and industries, but incentives are still inadequate to implement these solutions. The Commission should advocate for reducing water usage and share best practices across member states to support implementation.

1B

EXPAND INFORMATION ON WATER USAGE TO SUPPORT PUBLIC ENGAGEMENT

To reduce and protect our shared water resources, citizens and public should be involved. Citizen involvement is enabled by the availability of information and data on local water resources like reservoirs, catchments and rivers. This information is dependent on a broader digitalization of meters and management tools in the water sector. Public involvement leads to raised awareness on the real value of water supply, demand and wastewater, which, in turn, enables more sustainable water management.

1C

ENSURE WATER PRICES REFLECT THE REAL VALUE OF WATER

The EU must strongly facilitate and enforce price mechanisms as regulated in the Water Framework Directive Article 9. The water price must reflect the real value of water from abstraction, distribution, water use, to treatment. Mechanisms behind the pricing of water, and the ability to pay the price of water is not equal throughout Europe. The water price is the most effective mechanism to reduce water usage, and price mechanisms will ensure business models to reduce water usage in society and industries.

A vertical strip on the left side of the page shows a close-up of water splashing, with droplets and ripples in shades of blue and white. The main content area is a white rounded rectangle with a thin blue border, set against a light blue background.

1D

INCLUDE WATER EFFICIENCY INNOVATIONS IN THE INCITE INITIATIVE

The INCITE (Innovation Centre for Industrial Transformation and Emissions) initiative should begin its purpose to provide general knowledge at the EU level on the state of the art in the efficient use and reuse of water in relation to local resources in European industries. The water usage innovations cover monitoring techniques of efficient water usage, recycling and reuse of industrial water, price incentives, and recovery of resources from wastewater. All these elements are important items for INCITE to include. The INCITE should also identify activities and actions to be introduced into the updated acts of the EU Taxonomy.

1E

PROMOTE THE WATER-ENERGY NEXUS PRINCIPLE ACROSS THE EU

The Commission must expand the use of the principles behind the water-energy nexus. Reductions in water use will result in reductions in energy consumption and emissions of greenhouse gases. Understanding this linkage across member states is vital to reach both climate targets in 2030 and 2050, and energy reduction targets in the energy efficiency directive, while protecting the scarce water resources of the region. The impact assessments of water management projects should also be validated concerning energy and climate issues. In addition, projects in the energy sector should be validated based on their dependency on water or impact on the water resource, expected highly relevant for electrolysis processes.

1F

FOSTER THE REUSE OF WATER

The EU shall ensure a legislative foundation for maximizing the use of rainwater, greywater, and wastewater for non-potable purposes in all buildings, agriculture, and industries. This includes supporting member states in creating regulations regarding the harvesting and use of rainwater, as well as allowing and potentially incentivizing, water treatment and reuse. The legislative effort could include standards for quality of recycled water depending on the intended application and to encourage the perspective of the circularity of rainwater and recycled wastewater through collective systems and sharing of these water resources. Reclaimed water, such as harvested rainwater or reuse of water has the potential to relieve the burden on the drinking water reserve. The range of applications for the reuse of water resources is quite wide for cooling, sanitation, or industrial processes.



C2

STRATEGIC APPROACH TO WATER SUPPLY AND RESOURCES

2A

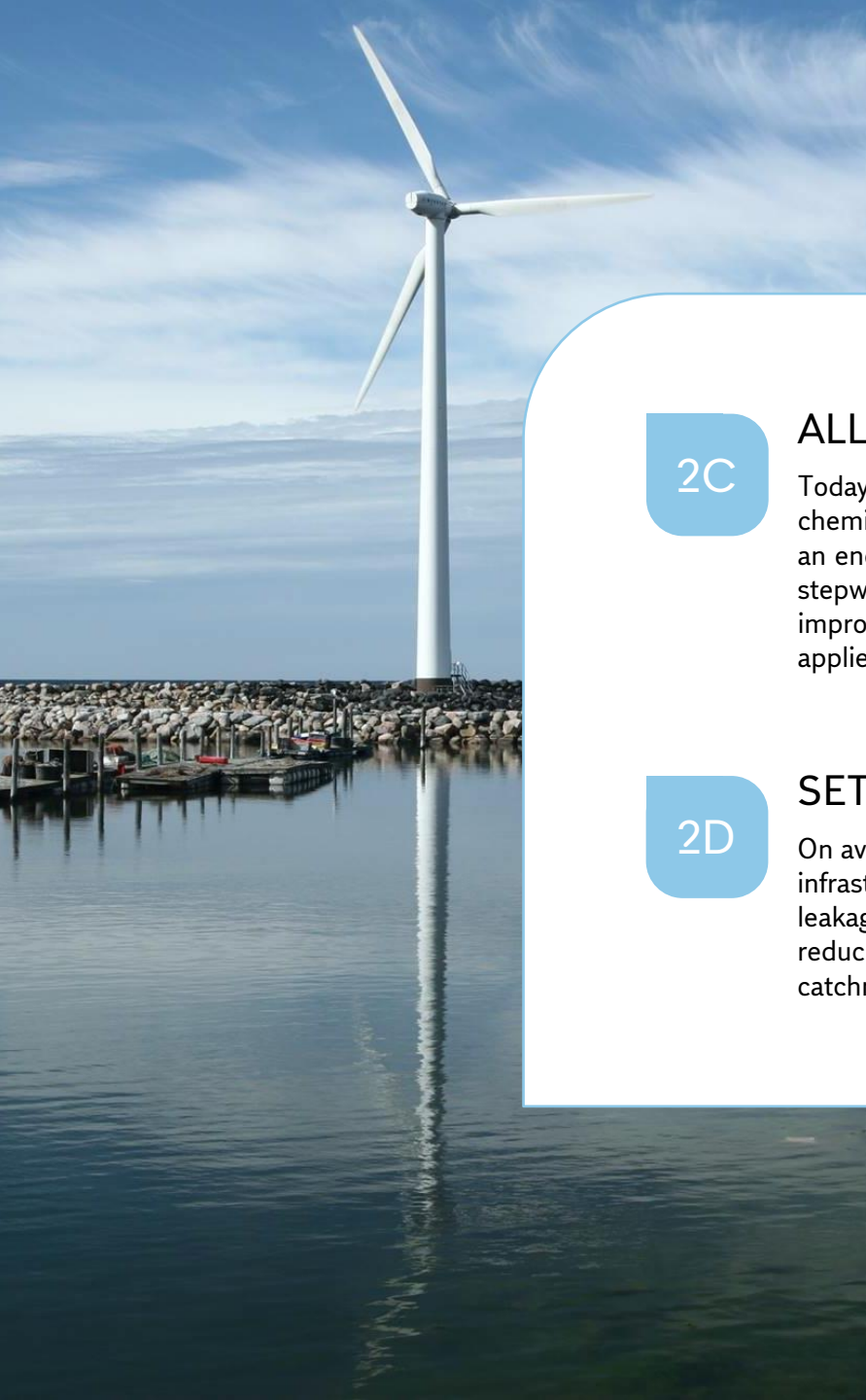
PREPARE A COHERENT EUROPEAN PLAN TO AVOID WATER SCARCITY

If drought conditions in Europe continue the next decades, a prognostic forecast on the migration of pivotal areas of population, as well as industrial and agricultural activities, is needed. A forecast is also essential to ensure that water resources are available for green hydrogen production (electrolysis), production of electronic chips and extended abstraction of raw materials in Europe. To prepare for these changes we need thorough planning of water resource management and planning for water infrastructure, where the European Commission should facilitate coordination across member states.

2B

WATER ABSTRACTION SHOULD BE BASED ON THE BEST AVAILABLE RESOURCE

The Commission should, in its evaluation of the national river basin plans, assess the quality and based on this assessment, evaluate whether sustainable water abstraction and quality of surface water is obtained by 2027. To ensure that member states' national plans are meeting the overall water framework directive, the Commission should facilitate knowledge and technical solutions for water abstraction. Permissions for water use should be granted based on the resources available from the catchment and aquifer. The potential for abstracting groundwater more broadly must be assessed across member states, and best practices should be facilitated by the Commission in terms of technical solutions and the protection of groundwater resources. Furthermore, desalination should be evaluated as a potential solution in areas where reductions and other water supplies have been harvested. The use of desalination as a potential water supply may become more widespread if challenges with the discharge of brine to avoid marine area impacts, and measures to enhance energy efficiency in the desalination process, are enhanced.



2C

ALLOW ‘PROGRESSIVE PROTECTION SCHEMES’ OF WATER RESOURCES

Today, member states and industries find it challenging to comply with EU regulations on water resource quality, as high chemical quality and status of water bodies are often hampered by historic emissions, e.g., mercury from using coal as an energy source. The Commission should allow member states to establish “progressive protection schemes”, where stepwise improvements to water use and impacts to quality are being implemented in a realistic pace as water improvement initiatives are complex and long-term. These schemes should be combined with approved action plans applied for water projects to achieve the goals of the EU water legislation.

2D

SET AMBITIOUS TARGETS FOR REDUCING NON-REVENUE WATER

On average, approximately 25% of our drinking water resources are lost in water leakages across the water distribution infrastructure in the EU. In 2028, the Commission will provide member states with goals and adopted thresholds for leakage rates and non-revenue water. These goals and thresholds should be set ambitiously with the aim of significantly reducing non-revenue water. Low thresholds for non-revenue will decrease the need for water abstraction in the catchment, support a more secure delivery of water and reduce energy consumption for water distribution.

CIRCULAR AND REGENERATIVE APPROACHES TO WASTEWATER TREATMENT

3A

PRESENT A FRAMEWORK FOR HARVESTING CRITICAL RESOURCES FROM WASTEWATER

The EU should present a framework to harvest and recycle critical resources and recycled materials in the wastewater treatment process. This will help meet the increasing demands of raw materials to be regionalized in the European continent. Resources in wastewater should be recovered as much as possible, including material resources as fertilizing agents, energy resources, and the waste resource itself. This entails the recovery of tangible resources, energy resources, and the reuse of the water itself, in accordance with the hydrology in local catchments.

3B

PRESENT A STRATEGY TO AVOID HAZARDOUS SUBSTANCES IN WATER DISCHARGE

The EU should present a two-way strategy to avoid environmentally hazardous substances in water streams and discharges. We should avoid the entry of substances into wastewater and develop effective treatment methods when this is the most retinal way to tackle the hazardous substances challenge. To support the avoidance of future environmental hazards in water streams, R&D projects should be initiated and funded to support innovative treatment techniques. This will support regenerative measures in the aim to protect environmental areas and ecosystems.

3C

SHARE BEST PRACTICES ON SOLUTIONS FOR OVERFLOW

Run-off from overloaded sewage systems due to heavy rain or outdated sewage infrastructure will face new requirements under the revised Urban Wastewater Treatment Directive. Overflow and heavy rain run-off of wastewater into rivers and lakes should be avoided e.g., through expanded use of nature-based solutions (NBS) and sustainable urban drainage systems (SUDS). The Commission should disseminate best practices and information on low-cost solutions to local authorities, facilitating the early implementation of these solutions.

C4

CONDITIONS FOR A EUROPEAN BLUE DEAL

4A

DIGITALIZE WATER MANAGEMENT, CYCLES AND UTILITIES

To harvest water-use reductions, distribute water more efficiently, identify available water resources, and build circular approaches in wastewater treatment, digitalisation and data are key levers. Data and digitalization will support the appropriate management and auditing of operations in water utilities and industrial water users. Data will allow for performance transparency for utilities across parameters, which is also required in upcoming corporate sustainability reporting, as well as capacity in industrial wastewater systems to comply with the Industry Emissions Directive. Digital water meters and water management systems will provide information for citizens and industries to understand water use, reduce consumption accordingly, and assess water quality - as you cannot save what you cannot measure.

4B

TARGET FUNDING FOR CRITICAL WATER INFRASTRUCTURE

Financing new initiatives to address the current and future water challenges is an issue of paramount importance to many stakeholders throughout Europe – from industry, and agriculture to utilities and citizens. The EU must target European funding opportunities to support water infrastructure, deployment of water efficient technologies, mapping best available water resources such as groundwater, and the acceleration of climate adaptation efforts such as nature-based solutions. Furthermore, the price of water will be instrumental in building strong business models for our future water system and attracting private capital. Lastly, member states must consider revising national subsidy schemes to finance water services in society at both local and national levels.

4C

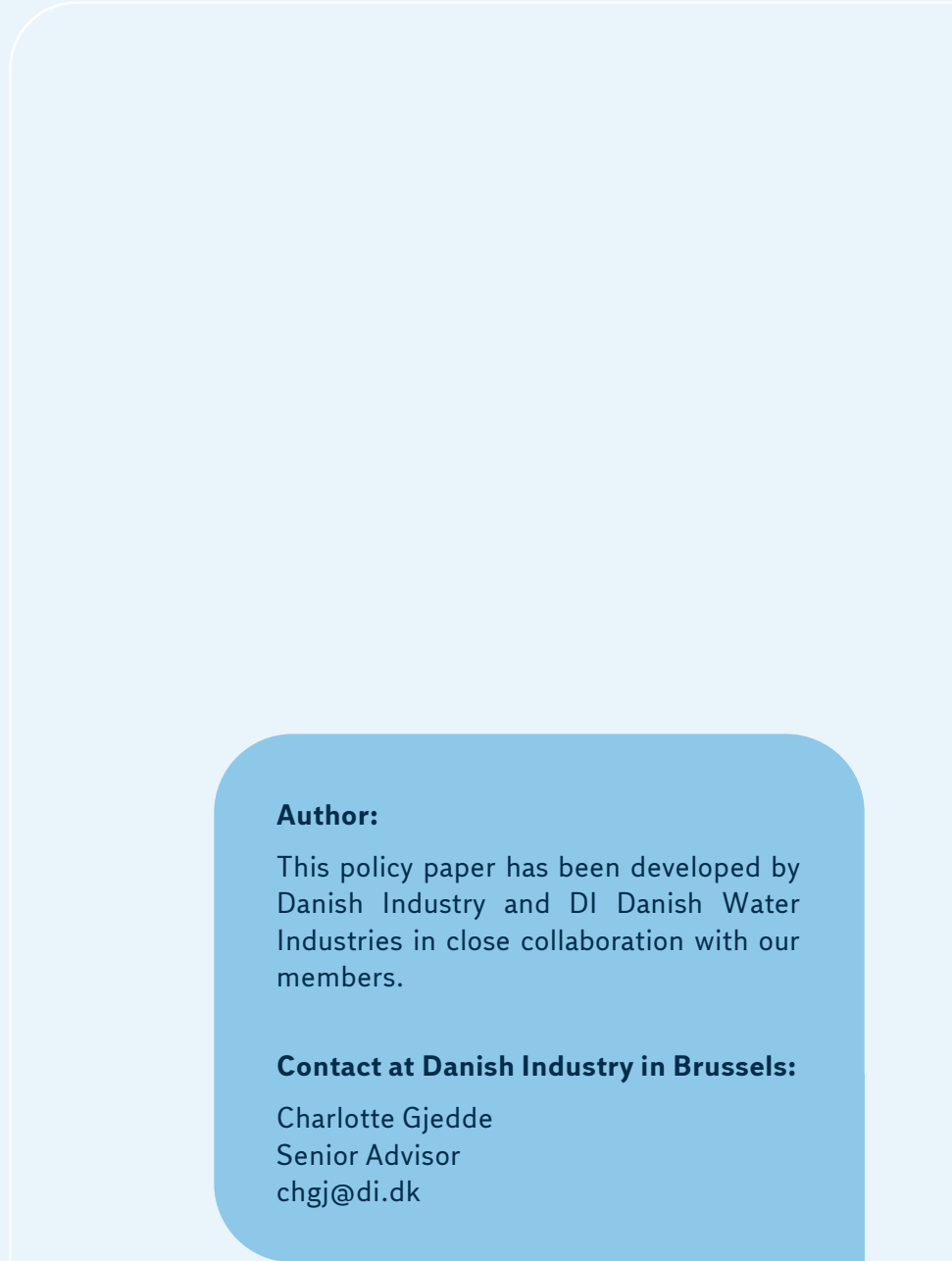
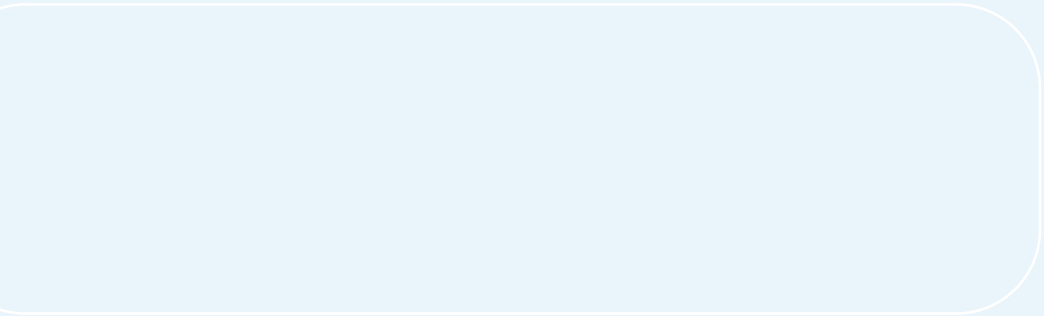
EU MUST BE A GLOBAL WATER STEWARD

Globally, access to clean water and sanitation is a human right and a prerequisite for delivering on the UN sustainability goals. A New European Blue Deal shall strengthen the EU's role as global water steward and the foundation of EU's international influence. In accordance with the European Council decision and European Parliament recommendation, "Water diplomacy" shall be enforced and an independent part of the EU's external action delivering a strategic and balanced dialogue with countries all over the world and also be prioritized as a business opportunity. Specifically in relation to EU's projects in developing countries, investments in sustainable water management shall – next to delivering on UN SDGs - support EU's policies and approaches towards mitigating local conflicts and reduce climate-related migration to EU.



WHY IS WATER RELEVANT FOR EUROPEAN COMPETITIVENESS?

The EU is introducing several initiatives to support growth, industry and not least competitiveness through the shift to strategic autonomy. The new European paradigm for competitiveness supports European manufacturing of green technologies, critical raw materials, chips and future innovations such as Power-to-X and green hydrogen. In all these industrial processes, water is a vital resource, and with the shift from global to European value chains the pressure on European water resources is increasing. With the aim for a digital and green transition, water is the condition, and there will be no green competitive EU without water.



Author:

This policy paper has been developed by Danish Industry and DI Danish Water Industries in close collaboration with our members.

Contact at Danish Industry in Brussels:

Charlotte Gjedde
Senior Advisor
chgj@di.dk