

Water policy under the European Green Deal State of play and key challenges ahead



The European Green Deal

Horizon2020 + **ICT4Water**

Pharmaceuticals Strategy

Strategic Approach to Pharmaceuticals in the environment

> Zero Pollution Action Plan for air. water & soil

> > **Chemicals Strategy**

Plastics Strategy

Biodiversity Strategy

Farm to Fork Strategy

Integrated Nutrient Management **Action Plan**

Mobilising research and fostering innovation

Transforming the EU's economy for a sustainable future

Financing the transition

And leave No one behind

The

European

Green

Deal

Leave no one behind

The EU as a global leader

A European Climate Pact

Energy systems

integration strategy

Methane strategy

Circular Economy

Action Plan 2.0

Renovation wave

Climate Adaptation

Strategy



Adopted initiatives with relevance for water

(1/2)

Title Title	Reference & adoption
The European Green Deal	COM (2019) 640 final 11.12.2019
A new Circular Economy Action Plan - For a cleaner and more competitive Europe	COM (2020) 98 final 11.3.2020
Biodiversity Strategy for 2030 - Bringing nature back into our lives	COM (2020) 380 final 20.5.2020
A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system	COM (2020) 381 final 20.5.2020
Europe's moment: Repair and Prepare for the Next Generation	COM (2020) 456 final 27.5.2020
EU Strategy on Energy System Integration (Followed by 'A hydrogen strategy for a climate-neutral Europe')	COM (2020) 299 final 8.7.2020 COM (2020) 301 final 8.7.2020
Short-term EU health preparedness for COVID-19 outbreaks	COM (2020) 318 final 15.7.2020
Annual Sustainable Growth Strategy – Guidance to Member States Recovery and Resilience Plans	SWD (2020) 205 final 17.9.2020
Improving access to justice in environmental matters in the EU and its Member States (Aarhus)	COM (2020) 643 final 14.10.2020
General Union Environment Action Programme to 2030 (8th EAP)	COM (2020) 652 final 14.10.2020



Adopted initiatives with relevance for water

(2/2)

Title Title	Reference & adoption
A Renovation Wave for Europe – greening our buildings, creating jobs, improving lives (and statement on the New European Bauhaus)	COM (2020) 662 final, 14.10.2020
EU strategy to reduce methane emissions	COM (2020) 663 final, 14.10.2020
Chemicals Strategy for Sustainability – Towards a Toxic-Free Environment	COM (2020) 667 final, 14.10.2020
New Consumer Agenda – Strengthening consumer resilience for sustainable recovery	COM (2020) 696 final, 13.11.2020
An EU Strategy to harness the potential of offshore renewable energy for a climate neutral Europe	COM (2020) 741 final, 19.11.2020
Pharmaceutical Strategy for Europe (and Update on progress and implementation EU Strategic Approach to Pharmaceuticals in the Environment)	COM (2020) 761 final, 25.11.2020
Sustainable and Smart Mobility Strategy – putting European transport on track for the future	COM (2020) 789 final, 9.12.2020
Forging a climate-resilient Europe – the new EU Strategy on Adaptation to Climate Change	COM (2021) 82 final, 24.2.2021
Pathway to a Healthy Planet for All – Action Plan: 'Towards Zero Pollution for Air, Water and Soil'	COM (2021) xx final, 12.5.2021



CEAP - Key targets related to water



- Food, water & nutrients one of the key product value chains addressed.
- Water reuse and water efficiency:
 - Facilitate water reuse and water efficiency, including in industrial processes
 - Application of the new Water Reuse Regulation (2020/741/EU)
 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2020:177:FULL&from=EN
- Sustainable product policy framework aim to set principles for product policy and requirements on products placed on the EU market.
- Review of the Industrial Emissions Directive, and integration of circular economy practices in upcoming Best Available Techniques (BAT) reference documents
- Adress and prevent microplastics → Environment, drinking water and food
- Key sectors: Building and textile







- 30% of EU land and sea protected, 1/3 of which under 'strict protection'
 - Freshwater ecosystems are included
- Restoration of freshwater ecosystems:
 - Increased efforts to restore freshwater ecosystems and the natural functions of rivers – WFD objectives to be met by 2027
 - Restore at least 25,000km free flowing rivers
 - Removal of primarily obsolete barriers
 - Restoration of floodplains and wetlands
 - Restore and preserve ecological flows → Member States review water abstraction and impoundment permits – WFD objectives to be met by 2027
- Focus → To implement and enforce EU environmental legislation



F2F - Key targets related to water policy



Reducing

- 50% of the use and risk of chemical pesticides and the use of more hazardous pesticides by 50% by 2030
- 50% (at least) of nutrient losses while ensuring that there is no deterioration in soil fertility
- 20% (at least) of the use of fertilizers by 2030
- 50% of sales of antimicrobials used for farmed animals and aquaculture by 2030

Objective: >25% of EU land under organic farming

Revising /Developing

- Sustainable Use of Pesticide Directive
- 2009 Regulation concerning statistics on pesticides and
- Integrated Nutrient Management Action Plans with Member States

Proposing

- Improved labelling to better meet consumers' information needs on healthy, sustainable foods
- Measures to facilitate the placing on the market of pesticides containing biological active substances

Providing

- Support from the Common Agricultural Policy and the Common Fisheries Policy through new streams of funding and ecoschemes to take up sustainable practices
- Farm advisory services i.e. promoting effective Agricultural Knowledge and Innovation Systems (AKIS)



Strategy on Energy System Integration



- Planning and operation of the energy system 'as a whole' → Multiple energy carriers, infrastructures, and consumption sectors
- 3 pillars: 1) More circular energy system 2) Greater direct-electrification 3) Clean fuels where electrification is difficult
- Reduce the energy-water footprint:
 - 1) Under Pillar 1: Potential of energy produced from bio-waste or in waste water treatment plants
 - 2) Circular Economy Action Plan → Increased sustainable production of **bioenergy from waste-water**, waste and residue, exploiting synergies and avoiding trade-offs
 - 3) Renewable and low-carbon fuel → Minimum shares or quotas in specific end-use sectors (including **maritime**) | Revision of the Renewable Energy Directive | Additional measures assessed under the REFUEL Aviation and **FUEL Maritime initiatives** (2020)
- A hydrogen strategy for a climate-neutral Europe → H2 can become an alternative low emission fuel for waterways and short-sea shipping

8th Environment Action Programme to 2030



- Water and marine in 2 of the 6 priorities:
 - d) zero-pollution ambition for a toxic free-environment, including for air, water and soil, and protecting the health and well-being of citizens from environment-related risks and impacts
 - e) protecting, preserving and restoring biodiversity and enhancing natural capital, notably air, water, soil, and forest, freshwater, wetland and marine ecosystems
- Enabling conditions:
 - (a) Ensuring effective and efficient **implementation** of Union legislation
 - (b) Strengthening the **integrated approach** to policy development and implementation
 - (c) Integrating environmental and climate sustainability in the **European Semester** of economic governance, including in the National Reform Programmes and National Recovery and Resilience plans
 - (d) Mobilising sustainable **investments**
 - (e) Phasing out environmentally harmful subsidies
 - (f) Ensuring that environmental policies and action are based on the best available scientific knowledge
 - (g) Harnessing the potential of digital and data technologies
 - (h) Making full use of nature based solutions and social innovation
 - (i) Effectively applying high standards for transparency, public participation and access to justice
 - (j) Making the data and evidence linked to the implementation of the 8th EAP publicly available
 - (k) Supporting the global uptake of the priority objectives



Renovation wave



- Focus on optimizing the overall built environment, also by encouraging investment and financing
- Major opportunity:
 - Represents 40% of EU energy consumption, 36% of EU GHG emissions
 - 75% energy inefficient, 80% in use after 2050
- Important role of water efficiency (room for technologies, water reuse, harvesting rainwater):
 - **Digital Building Logbooks**, which will incorporate 'The Level(s) Framework The European Framework for Sustainable Buildings', including water use
 - Principle of high health and environmental standards the text refers to ensuring high air quality, good water management, disaster prevention and protection against climate-related hazards, removal of and protection against harmful substances (e.g. asbestos and radon)
 - Principle of the green and digital transition, the text refers to smart buildings enabling efficient production and use of renewables at house, district or city level



Chemicals Strategy for Sustainability



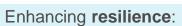
- Objectives → Protect health and the environment + Boost innovation
- Actions:
 - Mixtures: account for the **cocktail effect** of chemicals when assessing risks from chemicals
 - Banning the most harmful chemicals in consumer products allowing only where essential
 - Phasing out the per- and polyfluoroalkyl substances (PFAS) in the EU, unless their use is essential
 - Boosting the investment and innovative capacity for production and use of chemicals that are safe
 and sustainable by design, and throughout their life cycle
 - Promoting the EU's resilience of supply and sustainability of critical chemicals
 - 'One substance one assessment': Simpler process for the risk and hazard assessment
 - Playing a leading role globally by championing high standards and not exporting chemicals banned in the EU





Pharmaceutical Strategy for Europe

Main elements



- Environmentally **sustainable** pharmaceuticals

Diversified and secure supply chains

Crisis **preparedness** and response mechanisms



Ensuring a strong EU voice globally

- Delivering for **patients**: Fulfil unmet medical needs
- Ensure accessibility and affordability of medicines

Supporting a competitive and innovative European pharmaceutical industry

Environmental aspects

Flagship initiatives		Other actions
Revision of manufacturing and supply pharma legislation: • More transparency and oversight of the supply chain	Review the framework on good manufacturing practice and encourage inspections of good manufacturing and distribution practice to improve compliance	
	Enhance MS' capacity to participate in international inspection and audit programme	
Clear responsibilitiesOverall environmental sustaina	shility	Cooperation with international partners to ensure the quality and environmental sustainability of the active pharmaceutical ingredients imported from non-EU countries
Quality of medicines		Assess with MS and EMA the feasibility of improving information on manufacturing sites in existing databases or linked repositories, their use for products authorised in the EU and inspection status
 Revise pharma legislation: Strengthen the <u>environmental rist</u> requirements and conditions of us 		Continue the implementation of the actions under the strategic approach to pharmaceuticals in the environment , including the environmentally safe disposal of medicines and package reduction
Take stock of the results of research under the innovative medicines initiative	Engage with MS and stakeholders in developing best practices for decarbonising value chains	

EU Strategic Approach to Pharmaceuticals in the Environment (PiE)



Main elements – Reminder

- <u>COM(2019) 128 final</u> adopted on 11 March 2019, feeds in the Pharmaceutical Strategy
- Objective → To address the environmental implications of all phases of the lifecycle of pharmaceuticals (human and veterinary), from design and production through use to disposal
- Action areas:
 - 1. Increase awareness and promote prudent use
 - 2. Support the development of pharmaceuticals intrinsically **less harmful** for the environment and promote greener manufacturing
 - 3. Improve environmental **risk assessment** and its review
 - 4. Reduce waste and improve the management of waste
 - 5. Expand environmental monitoring
 - 6. Fill other **knowledge** gaps



EU Strategic Approach to Pharmaceuticals in the Environment – progress and implementation





Most advanced actions:

- Additional pharmaceuticals included in the WFD Surface Water Watch List (rev. August 2020)
- Provisions in the Regulation on veterinary medicinal products for more prudent use of antimicrobials in animals and to fight antimicrobial resistance
- New guidelines on hazardous domestic waste.
 Pharmaceuticals included in the UWWTD impact assessment
- Pharmaceutical concentration and antimicrobial genes sampled in JRC-LUCAS soil survey (results expected in 2022)
- Work with MS e.g. to ensure health professionals consider environmental impacts of medication



Sustainable and Smart Mobility Strategy – putting European transport on track for the future



- Sustainable, smart and resilient mobility system: a system for future generations
- Actions related to inland waterborne and short sea shipping transport:
 - Less pollution and biodiversity loss, and reduction of 90% of GHG emissions by 2050
 - 75% of road freight to **shift to rail and inland waterways** → Transport by inland waterways and short sea shipping will **increase by 25% by 2030 and by 50% by 2050**
 - By 2030, zero-emission vessels will become ready for market
 - FuelEU Maritime initiative to boost the production and uptake of sustainable fuels
 - Zero-emissions airports and ports
 - Development of TEN-T corridors and inland waterways into cities (last-mile of city logistics)
 - TEN-T guidelines consistent with the 'do no significant harm' principle and the Green Deal
 - NAIADES III programme to renew large fleets and improve access to finance, in compliance with the WFD and Habitats Directive
- Financial estimations → Additional 130 Bo € per year needed for fleets, 300 Bo € needed till 2030 to complete TEN-T network and infrastructures

EU Climate Change Adaptation Strategy





Some impacts estimated in the EU:

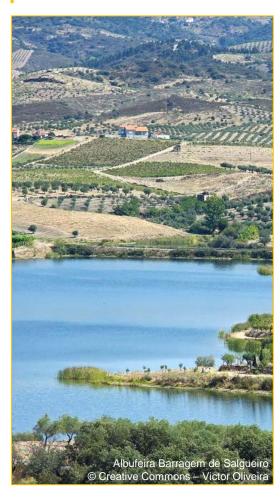
- Over €12 billion per year losses due to climate-related extreme weather events
- At least €170 billion per year in a global warming of 3°C above pre-industrial levels
- **2500 deaths**, due to the European heatwave of 2019

- 3 objectives and a range of actions:
 - Smarter adaptation → Knowledge and availability of data |
 Better data on climate-related risks and losses | European platform of adaptation Climate-ADAPT
 - More systemic adaptation → Improving adaptation strategies and plans at all levels of governance, society and economy and in all sectors | Integrate climate resilience in macro-fiscal policy | Promoting nature-based solutions
 - Faster adaptation → Accelerating the development and rollout of adaptation solutions | Reducing climate-related risk | Closing the climate protection gap | Ensuring the availability and sustainability of fresh water









- Towards a climate-resilient water management
 - Improve coordination of thematic plans and other mechanisms (incl. water resource allocation and water-permits) across sectors and borders
 - Reduce water use:
 - Raising the water-saving requirements for products
 - Encouraging water efficiency and savings
 - Promoting the wider use of drought management plans
 - Stable and secure supply of drinking water → climate change-risks in risk analyses of water management
 - Sustainable soil management and land-use
 - Nature-based solutions to achieve the goals of the Water Framework Directive and the Floods Directive



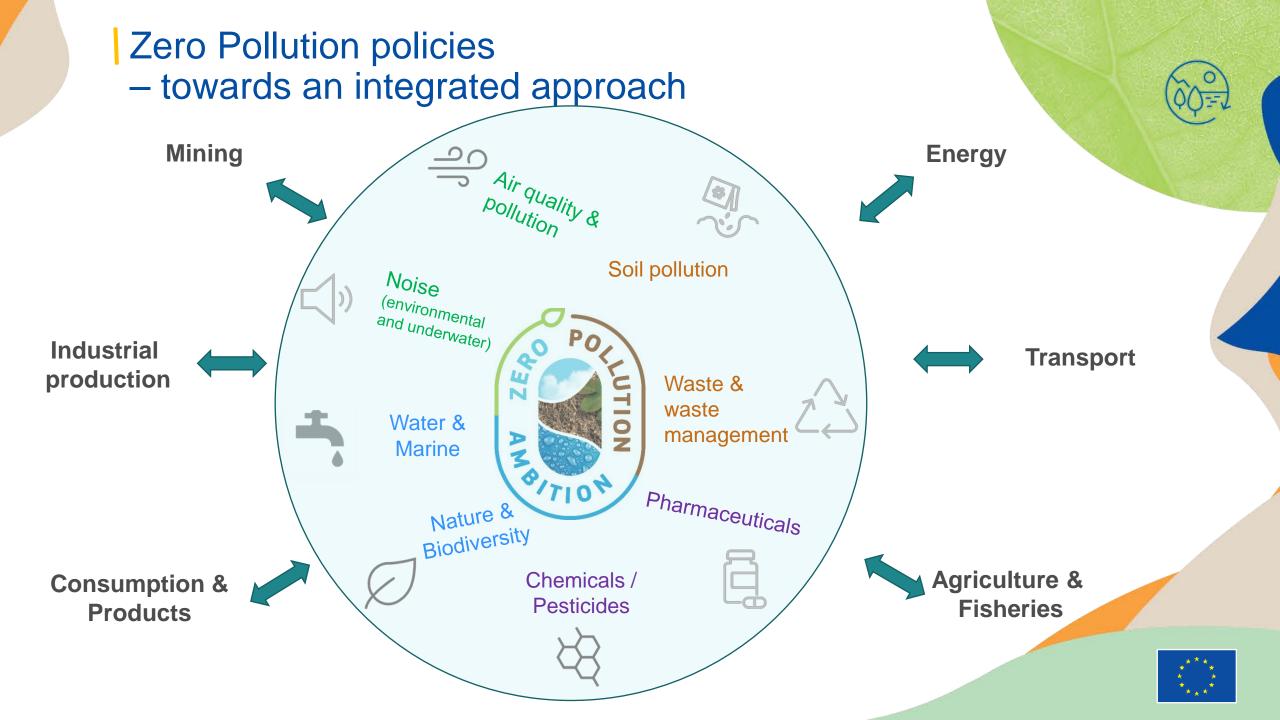
The zero pollution vision for 2050





Air, water and soil pollution is reduced to levels no longer considered harmful to health and natural ecosystems and that respect the boundaries our planet can cope with, thus creating a toxic-free environment."





Action Areas

Ensuring stricter implementation and enforcement

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Thematic priorities

Improving health and well-being

Towards zero pollution from production and consumption

Living within our planetary boundaries

Enablers

Boosting change across society

Promoting worldwide change

Tracking progress, anticipating trends and mainstreaming



Flagships – Integrated initiatives



1. Reducing health inequalities through zero pollution

2. Supporting urban zero pollution action

3. Promoting zero pollution across regions

4. Facilitating zero pollution choices

5. Enforcing zero pollution together

6. Showcasing zero pollution solutions for buildings

7. Living Labs for green digital solutions and smart zero pollution

8. Minimising the EU's external pollution footprint

9. Consolidating the EU's Knowledge Centres for Zero Pollution



To mobilise the necessary investments, the Commission is putting forward a two-fold response:



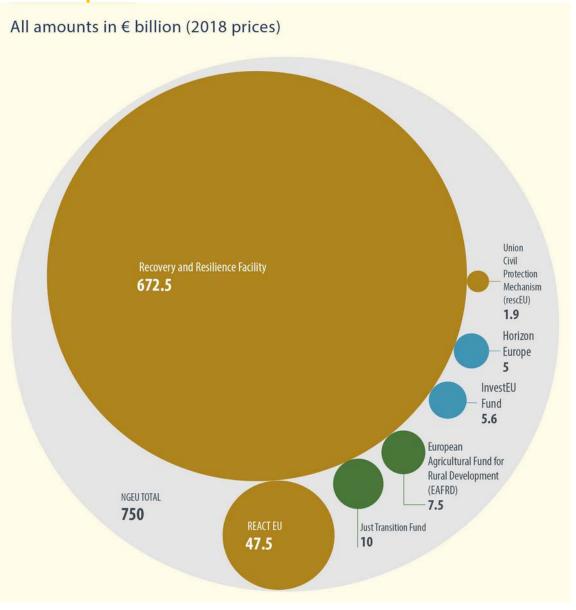
Next Generation EU

a new recovery instrument of €750 billion which will boost the EU budget with new financing raised on the financial markets for 2021-2024



A reinforced long-term budget of the EU for 2021-2027

Recovery and Resilience Plans



- The EU's long-term budget and the "Next Generation EU" instrument: A total of €1.8 trillion to help rebuild a post-COVID-19 greener, more digital and more resilient Europe
- Next Generation EU (2021-24) = EUR 750 billion
- 30% of the EU funds to fight climate change, the highest share ever of the European budget (NGEU, MFF).
- MS Recovery and Resilience Plans due on 30
 April: reform and investment agenda (green and digital transitions, fairness, macroeconomic stability)

European

Investment opportunities for water



Tools / Instruments

- InvestEU
- Just Transition Mechanism.
- REACT-EU
- Recovery Facility
- EAFRD
- EMFF
- Taxonomy
 Regulation and its delegated acts

Identify Needs

- Water Supply/Treatment: cf OECD/ENV study
- Improve knowledge on remaining WFD/MSFD investments needs
- Link to compliance gaps

Critical success factors

- Bankable projects
- Job creation
- Application polluter-pays principle
- Extended Producer Responsibility (EPR)
- Payments for ecosystems services

Process

- Integration in National Recovery Plans, Energy & Climate Plans
- Emphasis on financing/funding in forthcoming RBMPs / PoMs
- Country / sectoral priorities
- Technical assistance
- Still a lot to be done at Commission and Member State levels to ensure good projects emerge and benefit from funding!



Examples of green investments in water sector

Ensuring supply of safe and clean drinking water, in line with the revised DWD

Improving water distribution networks /eliminating leakages

Promoting water saving and reuse, water-efficient technologies

Constructing wastewater collection and treatment infrastructure, complying with UWWTD

Upgrading existing wastewater installations, including on treatment of chemical substances (such as pharmaceuticals)

Promoting industrial symbiosis technologies and projects for reuse of wastewater in industry

Constructing eco-friendly water storage infrastructure

Removing outdated infrastructures or upgrading existing water infrastructure to render them environmental or climate friendly

Supporting preparation for implementation of the new Regulation on Water Reuse Implementing coherent and tailored-made River Basin Management Plans and Flood Risk Management Plans

Improving implementation of the WFD and other water-related Directives

Investing in natural water retention measures

Investing into measures at source to counteract pollution

Promoting nature-based solutions

Optimising performance in green infrastructure and water infrastructure services

Promoting further synergies among water-related Directives

More published by the EC:

https://ec.europa.eu/environment/integration/green_semester/index_en.htm https://ec.europa.eu/environment/integration/green_semester/pdf/Water_examples_projects_Oct2020.pdf



Water in Horizon Europe



- Horizon Europe: 95.5 Bo € for 2021-2027 (incl. 5.4 Bo € NextGenerationEU) 30% increase
 - Political agreement reached on 11 December 2020
 - EP and Council to adopt the legal acts
- Elements to highlight:
 - 6 Thematic clusters → Collaborative research relating to societal challenges
 - 5 EU missions → Ambitious, time-bound and achievable goals
 EU mission on Healthy oceans, seas, coastal and inland waters
 - European Partnerships → Research and innovation programmes jointly developed and implemented by the EU, private and public partners
 - Co-funded partnership → 'Water Security for the Planet' (Water4AII)
 - Co-programmed partnership → 'Zero-emission Waterborne Transport'

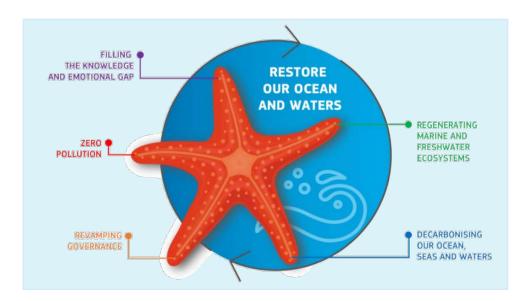






EU mission on 'Healthy oceans, seas, coastal and inland waters'

 Mission board's proposal in Set-2020: Mission Starfish 2030, restore our oceans and waters



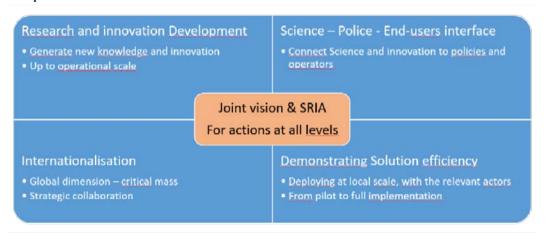
• 5 actions, 17 targets

https://ec.europa.eu/commission/presscorner/detail/en/IP 20 2345

European partnership 'Water Security for the Planet' (Water4All)



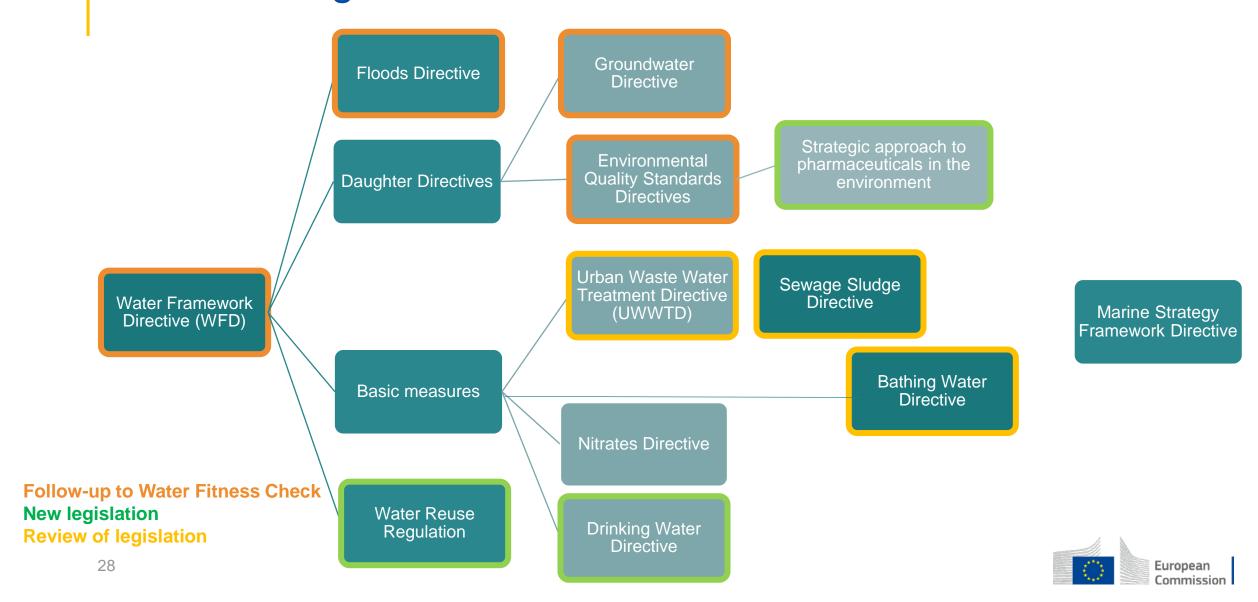
- Address freshwater security challenges as covered by EU water policies
- 4 pillars



https://ec.europa.eu/info/files/europeanpartnership-water4all-water-security-planet_en



EU water legislation



In COVID times



 The European Commission is coordinating a <u>common European response</u> to the coronavirus outbreak





- Water takes a fundamental part on this effort, since it has a great potential to promote economic growth and job creation in this crisis. The European Green Deal provides the appropriate framework.
- Recommendation (March 2021) on a common approach for the surveillance of SARS-CoV-2 and its variants in wastewater.



Have your say!

	Consultation roadmaps open
^	Water Framework Directive, FD, GWD and EQSD (Fitness Check follow-up)
	Review of the lists of priority substances and groundwater pollutants — Public consultation upcoming Q3 2021 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12662-Revision-of-lists-of-pollutants-affecting-surface-and-groundwater
R	Urban Waste Water Treatment Directive
	Revision of the Directive - Public consultation open till 21 July 2021 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12405-Revision-of-the-Urban-Wastewater-Treatment-Directive
်င္ပ	Bathing Water Directive
\$50	Revision of the Directive — Public consultation upcoming Q2-2021 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12658-Bathing-water-quality-review-of-EU-rules
	Sewage Sludge Directive
• 0	Evaluation of the Directive – Public consultation closed on 5 March 2021 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12328-Evaluation-of-the-Sewage-Sludge-Directive-86-278-EEC-/public-consultation
	Industrial Emissions Directive
	Enhanced water efficiency/reuse in industrial processes to be explored – EC adoption planned for Q4 2021 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12306-EU-rules-on-industrial-emissions-revision



Summing up

- The European Green Deal is instrumental for a shift towards a greener, a better Europe, and to become water-smart in our way of living within the boundaries of our wonderful blue planet
- Green Deal initiatives give many opportunities for water related actions
- Post-covid EU budget: 'Europe's moment: Repair and Prepare for the Next Generation'
- Have your say on ongoing and upcoming public consultations!
 https://ec.europa.eu/info/law/better-regulation/have-your-say

