



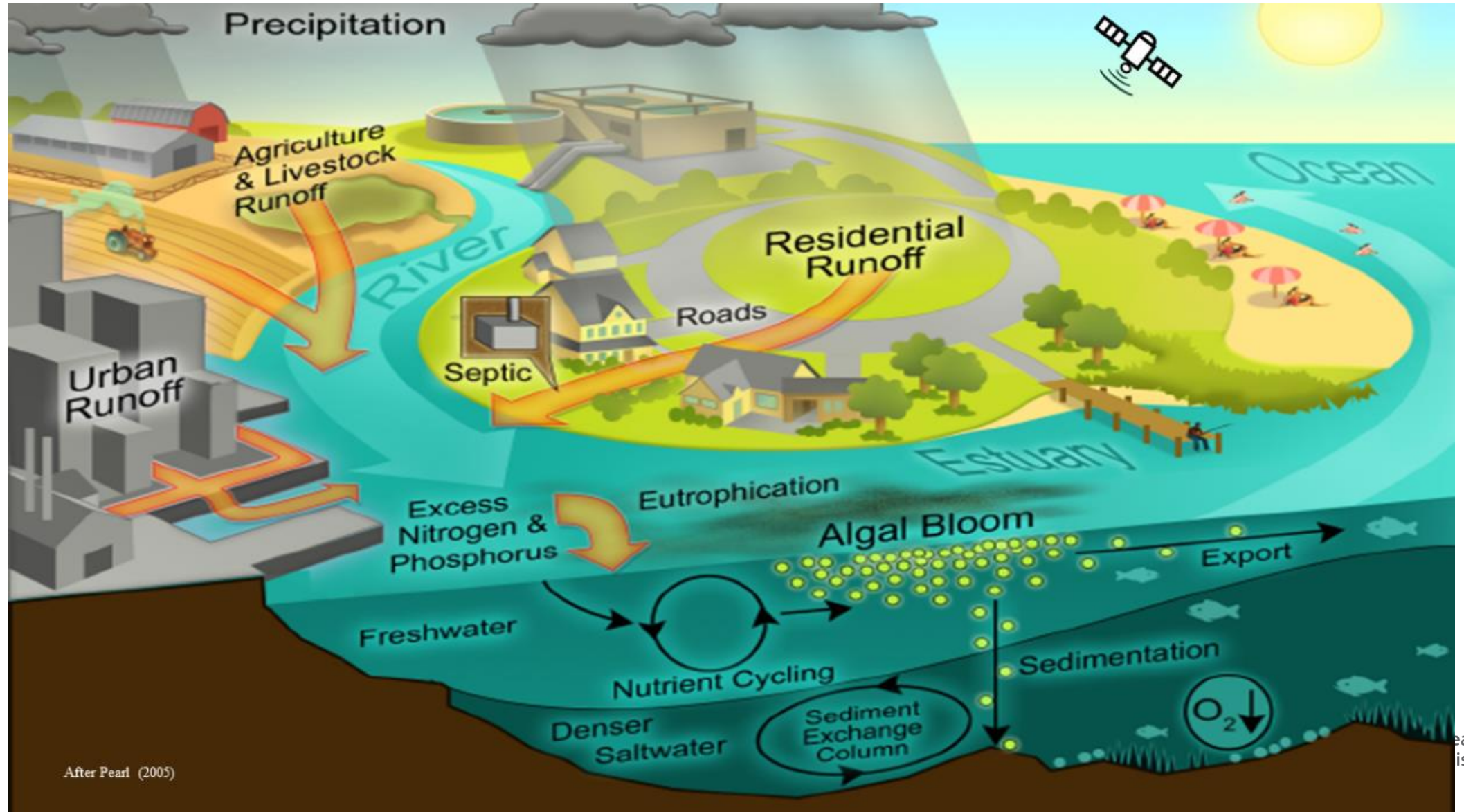
Overview about research and policy programs for hydropower

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D.2. Ocean and Water

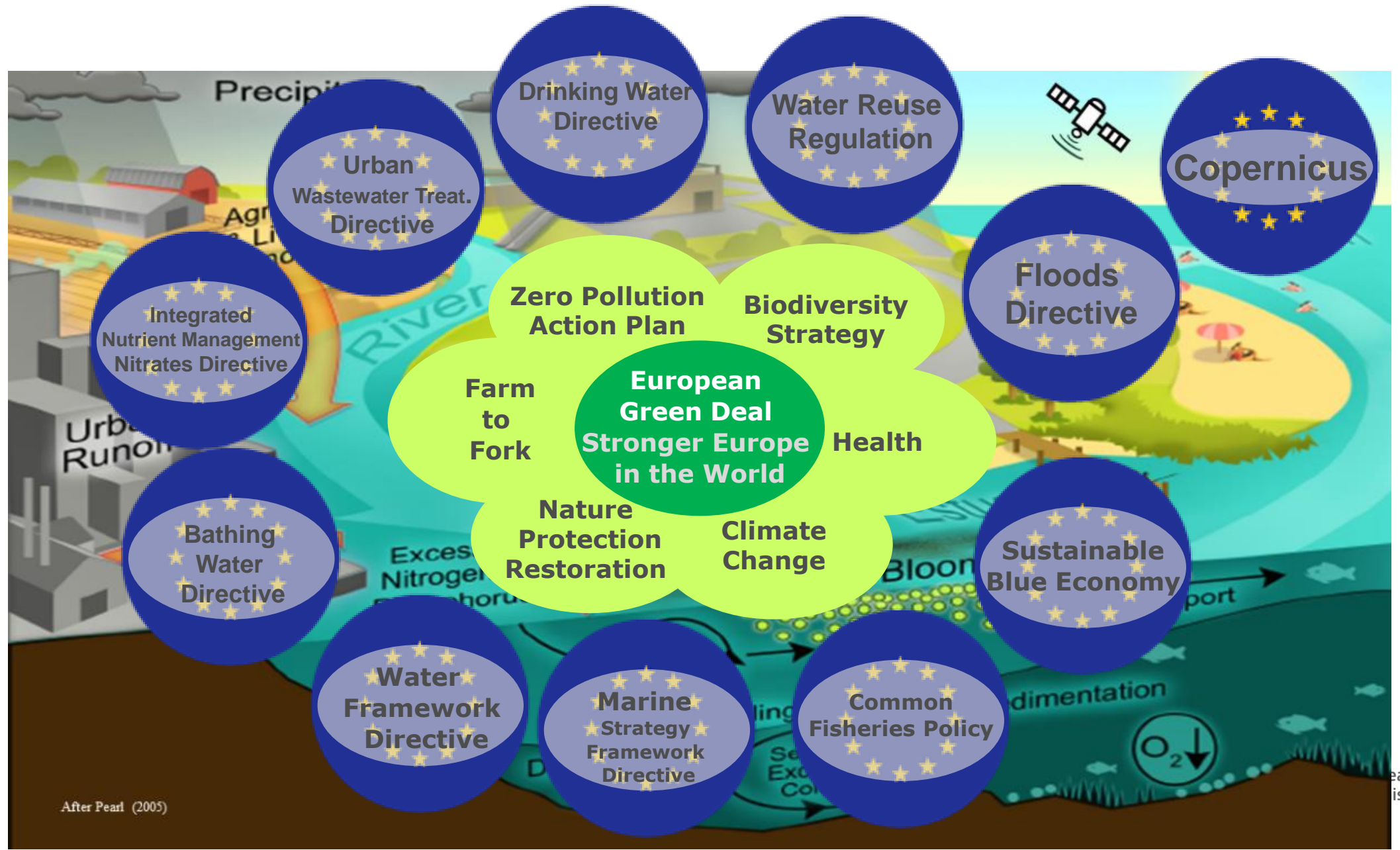


JRC Ocean and Water

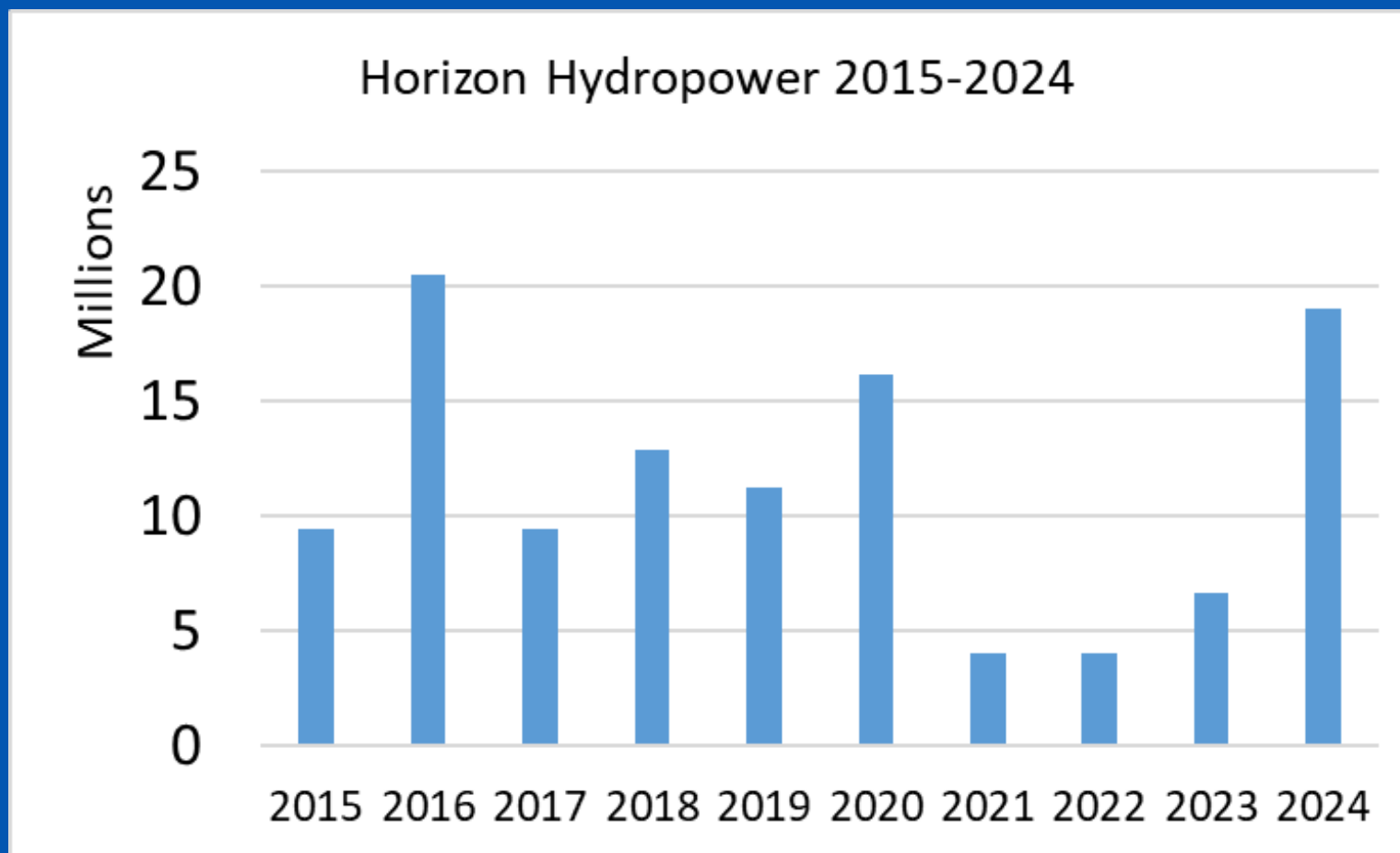
Holistic and integrated support: freshwater - coast - sea



The EU Water Acquis (extended)



Horizon projects



Funded Horizon projects (today)

Title
HYDRO4U: Hydropower For You - Sustainable small-scale hydropower in Central Asia
ALPHEUS: Augmenting grid stability through Low-head Pumped Hydro Energy Utilization & Storage
HYPOS: HYdro-POwer-Suite

Recast Urban Wastewater Treatment Directive

Member States shall ensure that, at national level, the total annual energy from renewable sources, generated on-site or off-site by or on behalf of the owners or the operators of urban wastewater treatment plants treating a load of 10 000 p.e. and above [...] is equivalent to at least 100 % of the total annual energy used by such plants by 31 December 2045.

→ Small hydropower on the effluent of the treatment plant



Social Climate Fund (SCF)

The fund will support a fair transition towards climate neutrality. It will provide EU Member States with dedicated funding so that the most affected vulnerable groups, such as households in energy or transport poverty, are directly supported, and not left behind during the green transition.

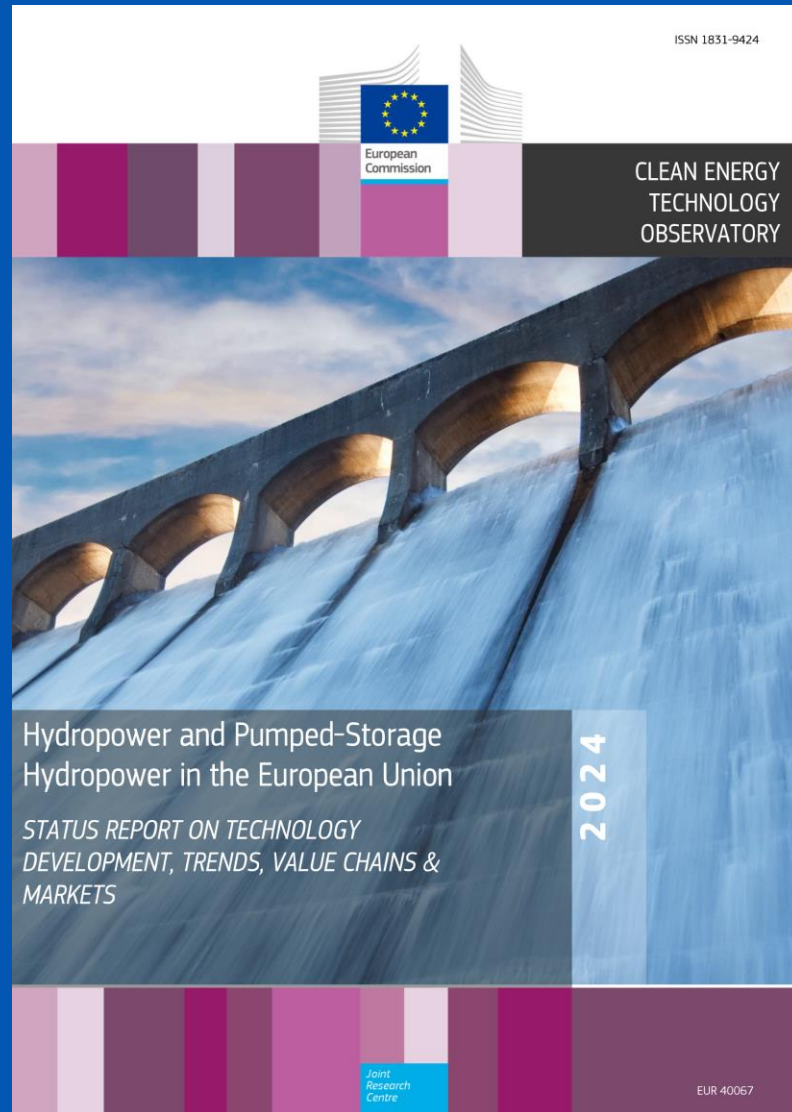
The SCF will support people all around the EU. Member States may use the SCF to support structural measures and investments in energy efficiency and renovation of buildings, clean heating and cooling and integration of renewable energy, as well as in zero- and low-emission mobility solutions.

-> Refurbishment of small hydropower plants is eligible

Water Resilience

- Water and aquatic ecosystems are under severe pressure. The European Water Resilience Strategy will develop a comprehensive multi-annual cross-sectoral plan with milestones in 2030 or 2040. The aim is to:
 - make Europe water-resilient, ensuring that water sources are properly managed and scarcity is addressed
 - strengthen the competitiveness and innovative edge of our water industry and take a circular economy approach.
- > water storage is a key topic (managed aquifer recharge, reservoirs, green areas, wetlands...). Refurbishment and optimization of hydropower reservoirs is important

Clean Energy Technology Observatory 2025



The *technology state-of-the-art and future developments and trends* section builds on the:

- technology readiness level
- Installed capacity and electricity production
- Technology costs
- Public and private R&I funding
- Patenting trends
- Scientific publication trends
- Impact of EU R&I

The *value chain analysis* maps the situation of the technology with regard to the:

- Turnover
- Gross Value Added
- Environmental and socio-economic sustainability
- EU companies
- Employment
- Energy intensity and labour productivity
- EU production

The *EU position and global competitiveness* analyses the EU position in the global market according to the:

- Global and EU market leaders
- Trade, imports and exports
- Resources efficiency and dependence

Net Zero Industry Act

- It aims to enhance European manufacturing capacity for net-zero technologies and their key components, addressing barriers to scaling up production in Europe
- Making the EU the home of clean technologies manufacturing and green jobs

-> hydropower is listed in the strategic technologies

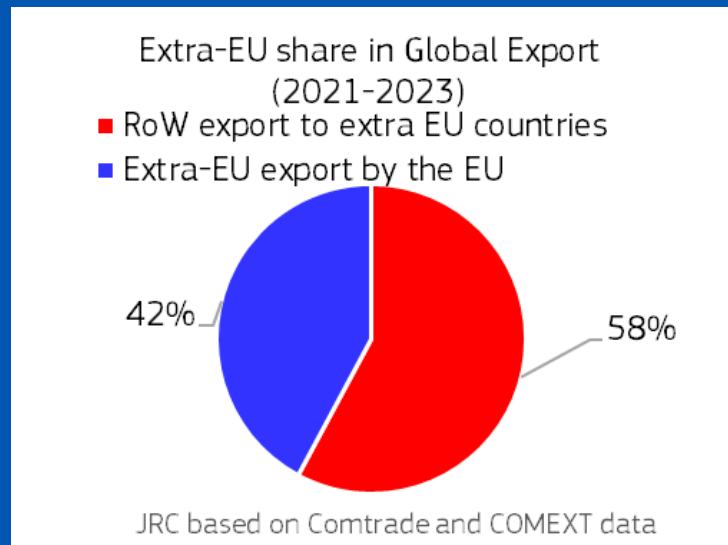


Figure 36. Extra-EU trade for hydraulic turbines and parts [EUR Million]



Source: JRC based on COMEXT data

Important European conferences


HYDRO 2025

 **22-24 October 2025**




 **Helexpo, Thessaloniki, Greece**

**HYDRO
2025**



 **SUSHP 2025**
Sustainability in Hydropower

[Home](#) [Conference Aims](#) [Highlights](#) [Program](#) [Call for Abstracts](#) [Key Dates](#) [Speakers](#) [Ticketing](#) [Contact](#)

Abstract submission is open!

3rd International Conference on
Sustainability in Hydropower
Vienna & Online

2-5 September 2025
BOKU University
Vienna, Austria

Solutions for Global Sustainability in Hydropower –
Balancing Water Use, Ecology, and Community Benefits

Thank you



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