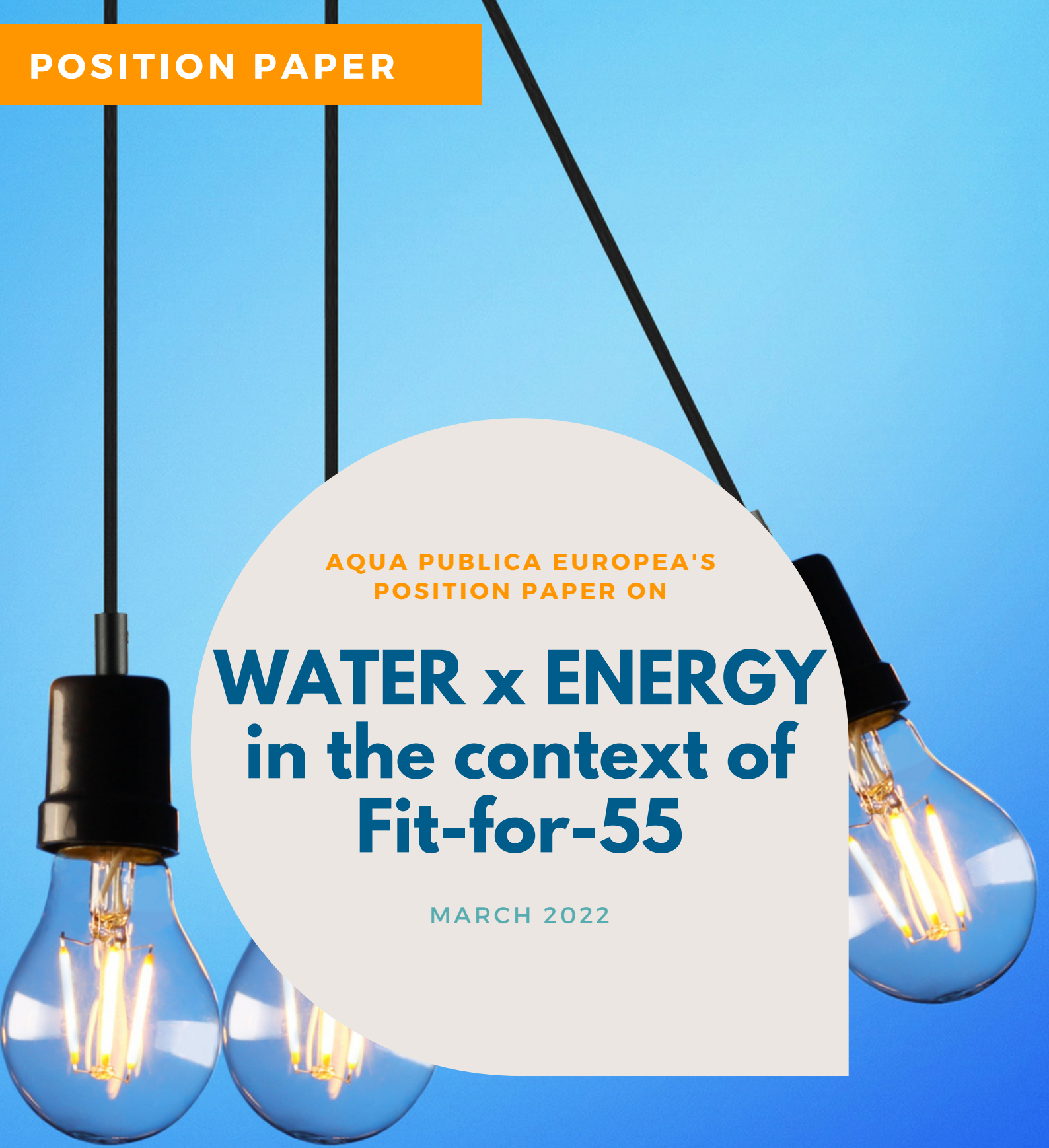
POSITION PAPER



AQUA PUBLICA EUROPEA'S POSITION PAPER ON

WATER x ENERGY in the context of Fit-for-55

MARCH 2022

Aqua publica europea

Aqua Publica Europea, the European Association of Public Water Operators, welcomes the European Commission's Fit-for-55 Package and the proposals to set the EU on the path for climate-neutrality.

Water and energy are deeply interconnected. The energy sector is an important water user – according to the European Environment Agency, energy production accounts for 18% of total water use in the EU (compared to 9% for households). On the other hand, the water sector requires energy to fulfill its mission to provide safe water and sanitation to all. Finally, water operators also produce energy in the framework of their operations.

In a context where climate objectives meet the need to increase European energy security, all resources must be mobilised to facilitate a sustainable energy transition.

Considering the relations between water and energy and **the potential of public water and wastewater operators to play a key role in this transition**, we would like to highlight some key elements for consideration in the discussions related to the Fit-for-55 proposals, and in particular, the recast of the Energy Efficiency Directive, the Renewable Energy Directive and the Energy Performance of Buildings Directive.

KEY MESSAGES

1. **Public water and sanitation operators are committed to tackle climate change throughout their industrial activities**

2. **Public water operators' contribution to the energy transition and Europe's energy resilience must be encouraged and facilitated**

3. **Aqua Publica Europea supports the inclusion of references to the water-energy nexus**

4. **For clarity and fairness, requirements for the water and wastewater sectors should be defined in water legislation**

1 PUBLIC WATER AND SANITATION OPERATORS ARE COMMITTED TO TACKLE CLIMATE CHANGE THROUGHOUT THEIR INDUSTRIAL ACTIVITIES

Because of important energy needs for water and wastewater operations, increased energy efficiency is an opportunity to improve climate impact while reducing costs.

Aqua Publica Europea member operators are implementing many initiatives to reduce their energy consumption.

During a recent '***Water Erasmus***' exchange, experts from utilities members of Aqua Publica Europea met to discuss energy efficiency strategies. Current practices include **investment in modern aeration systems, real-time aeration control, or optimized and more efficient heating and lighting systems**

WATER ERASMUS
AQUA PUBLICA EUROPEA

2 PUBLIC WATER OPERATORS' CONTRIBUTION TO THE ENERGY TRANSITION AND EUROPE'S ENERGY RESILIENCE MUST BE ENCOURAGED AND FACILITATED

In addition to increasing their energy efficiency, **public water operators can also be energy producers**. In a broader context of energy tension, **their efforts must be met with an enabling framework in order to reap the full benefits from their contribution to European energy resilience.**

In many cases, the share of renewable energy used is increasing, including from own production with **solar panels installed on plant roofs or biogas produced from sludge treatment.**

Public water operators have developed operations to produce energy, such as biogas from sludge treatment or **heat recovery** from wastewater. Through cooperation with other public actors at municipal level, some operators are already testing solutions to power, heat and cool buildings or districts. These are increasingly crucial for the diversification of energy sources and contribution to powering Europe.

SOME CONCRETE EXAMPLES

VIVAQUA
BELGIUM

*In **Brussels**, VIVAQUA's Riothermia project to recover heat from sewage waters through a heat exchanger is being tested to provide 25% of the heating and cooling needs of an administrative building and cut 40 to 60 tons of CO2 emissions per year (more info)*


© VIVAQUA

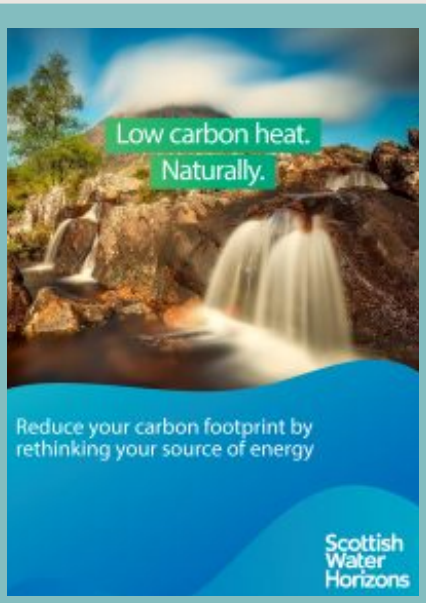
eau de Paris
L'eau. Un service public
FRANCE

Eau de Paris' 20 000 m2 of available roof space allowed to place 6578 solar panels - the largest solar power plant in the region - to provide 1600 MWh/year to be reinjected in the local grid, equivalent to the energy consumption of 500 households, and an avoided 92 tons of CO2 emissions per year (more info)


© Studio Vu / Soprema Entreprises

Scottish Water
Trusted to serve Scotland
UK

Through a public sector collaboration, Scottish Water, the Scottish government and the Stirling municipality invested £3 million in an energy center supplying low carbon energy to a district heat network, using sewage heat recovery and combined heat and power technologies, projected to save the council 381 tonnes of carbon each year and resulting cheaper for consumers' than gas alternatives (more info)



HAMBURG WASSER
GERMANY

HAMBURG WASSER's sludge incineration plant generates 62 GWh/a (electric) & 80 GWh/a (thermal)

PARIS
FRANCE

In Paris, sewage waters – between 12 and 20 degrees year-round - are expected to produce half of the heating needs of a district hall and a school and save 102 tons of CO2 per year. (more info)

RECOGNISING AND SUPPORTING THE ENERGY PRODUCED FROM WATER AND WASTEWATER PROCESSES FOR MORE SECURITY IN ENERGY SUPPLY

Aqua Publica Europea supports the target to increase the share of renewable energy to contribute to climate goals and strategic independence, which strengthens the EU's resilience.

To benefit fully from the opportunities provided by non-fossil energy production, it is critical to recognise the different sources of energy produced in the framework of water, wastewater and sludge treatment operations.

Public water operators already invest in new energy technologies that contribute to better exploiting their own operations while reducing their footprint.

However, without enabling conditions and support, these efforts risks meeting hurdles and not being able to yield their full potential: **they require sufficient investment, adequate governance and economic framework that facilitate the access to the grids.**

Energy produced in the course of water, waste-water or sewage sludge treatment should be considered as renewable in the Renewable Energy Directive

It is paramount to acknowledge the contribution of the energy generated by water operators to EU climate objectives and energy security while simultaneously benefiting local communities.

Integration into grids should be facilitated and supported, both technically and financially, and barriers to grid expansion removed.

3 AQUA PUBLICA EUROPEA SUPPORTS THE INCLUSION OF REFERENCES TO THE WATER-ENERGY NEXUS

Considering the strong interlinkages between water and energy, we encourage the inclusion of references in legislation to the water-energy nexus and requirements for assessments of water consumption in the energy sector.

4 FOR CLARITY AND FAIRNESS, REQUIREMENTS FOR THE WATER AND WASTEWATER SECTORS SHOULD BE DEFINED IN WATER LEGISLATION

As the European Commission has already announced that it plans to include energy-related requirements in water legislation – in the context of the revision of the **Urban Waste Water Treatment Directive** – we caution against defining additional requirements in the Energy Efficiency Directive as these would risk creating confusion and uncertainty for operators.

Water and wastewater treatment are industrial activities performed provide essential services, ensuring, from a health perspective, that drinking water is safe and, from an environmental perspective, that wastewater is adequately treated to avoid pollution of water bodies, in accordance with EU legal requirements.

We also highlight that, while they are public buildings, water and wastewater treatment facilities operated by the public sector cannot be considered in the same manner as administrative buildings as they perform specific industrial processes. Therefore, they **should be exempted from the requirements applied to public sector buildings.**

A clear exemption from the scope covered by "public buildings" in the Energy Efficiency Directive, along with regulation in sectoral legislation, would additionally contribute to an **equal playing field for public and private operators** operating and competing in the same field.

WHY CHOOSE SECTORAL LEGISLATION OVER THE ENERGY EFFICIENCY DIRECTIVE

The European Commission is currently revising the Urban Waste Water Treatment Directive (UWWTD). This is the opportunity to introduce up-to-date rules for the sector, integrate new challenges and align with EU climate priorities.

The Commission is already considering the inclusion of provisions on energy requirements for the wastewater treatment sector, including energy audits.

Overlaps between two pieces of legislation risk creating confusion and uncertainty and lead to ineffectiveness of the measures. It is therefore necessary to select the most appropriate instrument.

Specific wastewater legislation is the most appropriate instrument as it allows to take into account the particularities of the sector and define adequate, tailored measures.

Growing challenges, including climate, demography and emerging pollutions, are expected to lead to increased wastewater treatment requirements. In turn, more treatment may imply more energy use. Therefore, appropriate energy targets need to be defined in conjunction with other environmental targets.

The wastewater treatment sector's energy needs depend heavily on many factors including climate, geography, landform, urban/rural context, remoteness, etc. A tailored approach is critical to achieve energy objectives.

The diversity, in size or location for example, of wastewater treatment plants across Europe has an impact on the efforts needed to increase energy efficiency: objectives can be more difficult to meet for smaller or more remote plants and rural operators with many small plants disperse across the territory can see requirements multiply, creating a disproportionate economic burden. Legislation must therefore consider this heterogeneity.

Aqua Publica Europea (APE) is the European Association of Public Water Operators. It unites 66 publicly owned utilities providing water and sanitation services to about 80 million people in 13 European countries, to promote public water management at both European and international level. APE is an operator-led association that looks for efficient solutions that serve the public rather than corporate interests.

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