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Circular economy and resource efficiency: a driver of economic growth in Europe

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Abstract :

The return to growth, the preservation of our environment and reducing our dependency on raw materials and energy suppose a profound transformation of our production and consumption processes which will not be possible without resorting to the paradigm of circular economy. The areas of optimal transformation of energy, waste recycling and treatment of water are the triptych upon which our economy and the environmental balance of our territories as well as of our planet as a whole are based. Veolia has developed technologies and expertise that reduce the consumption of resources - energy, materials, water - and limit or even eliminate damaging releases to the environment. Firstly, the transition to a low carbon economy is a prerequisite for the European Union to gain energy independence, a key objective in this period of geopolitical uncertainties in the European eastern border. Then, the industrial renaissance of Europe will only be achieved if it uses and recycles the limited resources available in an optimum efficiency; we must place the recovery of waste at the centre of the new business models. In presenting the package of proposals on "circular economy" on 2nd of July last, the European Commission has underlined how a more efficient use of resources can lead to new opportunities for growth and jobs. Finally, the EU policy in the field of water policy must be based on supported-facts rather than on ideologies in order to ensure the necessary investments for the sustainability and performance of infrastructures; which are the ultimate guarantees for the human right to water and sanitation. Based on our field experience and our ability to innovate and disseminate innovation with local communities and industry, we have prepared twelve proposals for an efficient implementation of the circular economy concept into the new driving force of economic growth in Europe.

INTRODUCTION

Unleash economic growth to put an end to the mass unemployment that plagues Europeans, in particular the younger generations; contribute to the industrial Renaissance of Europe and the improvement of its competitiveness in the world; protect and use more efficiently our resources so that Europe becomes more attractive. These three objectives are both the cornerstone priorities of our politicians and the aspirations of the European citizens. They are intertwined and need to be harmonised not only at the continent level but also in our local communities.

More than three out of four Europeans live today in urban areas. The eighth edition of the "Green Capital of Europe" prize – a contest based on twelve environmental and climate indicators, highlights the eagerness of

European cities to put forward their environmental assets to attract companies, researchers or students.

A sustainable recovery of the European competitiveness can be obtained only if local communities are part of that process. Economic growth must take into account the double impact it has on the planet: upstream in consuming resources that are quickly shifting from rare to scarce and downstream in releasing pollutants and other wastes in the environment.

This is the key reason why Europe must be at the forefront, building a new engine for its future growth, based on circular economy and resource efficiency. It is the main purpose of the "circular economy package" proposed by the European Commission on 2nd July.

The circular economy provides pragmatic and effective solutions to the gradual depletion of vital resources for the functioning of modern economies. By closing

the cycles of materials, water and energy, this "other" economy allows the Economy to grow, while decreasing extraction from nature.

The circular economy is based on a paradigm shift: waste is turned into a resource. It is therefore an economy of recovery and re-use, but also and especially a re-creation economy! In doing so, it transforms production chains and consumption patterns, and decouples GDP growth from natural resources use.

World leader in waste management and energy recovery, world leader in wastewater recycling, forerunner of energy efficiency in buildings, Veolia is a key player in this new economy that turns waste into resources.

It will be essential to invent new economic models and to think outside the box, both for cities so that the resource efficiency effort remains affordable for public authorities and for companies as their quality of offering and competitiveness must be preserved. The European Union can strongly contribute, in particular through legislative and regulatory policies that will spur innovation, encourage the development of alternative resources and stimulate initiatives.

This is the meaning of the twelve recommendations that follow – resulting from field experience of our 190,000 employees - to the attention of recently elected Members of the European Parliament and the new Commission. These elements are in line with the concept of circular economy, which, we believe, is an essential condition for a return to sustainable economic growth in Europe, but which will also improve the standard of living and better protection of the environment for all.

1. THE TRANSITION TO A LOW-CARBON ECONOMY OUGHT TO BE DESIGNED AND IMPLEMENTED WITH A COMBINED OBJECTIVE OF ENHANCING EU ENERGY SECURITY AND INDEPENDENCE

Circular economy multiplies the productivity of resources extracted from nature: it therefore meets the targets set by the EU in terms of resources efficiency. It does not only aim at an optimal use of water and raw materials, but also of energy resources.

As far as the energy policy is concerned, the priority

is today to achieve better coherence between the combined objectives of climate change mitigation and energy security and independence. Energy efficiency is the most effective means to combine decarbonation of the economy and improved EU energy security.

Recommendation 1: Energy efficiency objectives should be fully embedded in all EU and national policies, through reductions of consumption across every sector of the economy. This entails compulsory energy efficiency targets.

The potential for reducing the consumption of fossil fuels through energy efficiency policies is much greater than substituting these fossil energies for other renewables. Such policies can also contribute to the development of new economic activities, in Member States and locally, within European regions and cities, thus creating new pools of long-lasting jobs, stimulating growth and reducing energy dependency. Yet, energy efficiency as a fundamental policy and strategy instrument is not sufficiently taken into consideration by European and national policy makers.

At EU level, a binding objective was set for 2020 to reach 20% energy savings. The EU is likely to miss it by 1%, only while its CO₂ emissions [1] and renewables targets [2] will be exceeded (for which compulsory objectives were set in 2008). The advantages of a binding approach are hence tangible and are a valuable lesson for policy makers who are in charge of defining policies for the post-2020 regime. In times of economic and energy crisis, energy efficiency combined with the diversification of energy sources can help address current difficulties in the context of the recent Ukrainian and Russian crisis.

Therefore, I propose to introduce the "energy efficiency" parameter in all relevant EU policies (in particular competition, trade, transport, industrial and innovation areas). In addition, the European decision makers should consider the need to define compulsory energy efficiency targets for the 2020 and 2030 horizons (targets set according to energy performance indicators specific to each sector, and defined in terms of primary energy savings), as well as to provide adapted legal and financial incentives for Member States to respect pre-agreed goals.

1. For the year 2020, total emissions are projected to be 24.5% below [1990] levels

2. See: http://keepontrack.eu/contents/publicationseutrackingroadmap/roadmap_finalversion3.pdf

Heat represents almost 50% of the total energy consumption of Europe. A significant reduction in the EU energy consumption, in particular fossil fuels, will thus only be feasible through a genuine Heat policy at EU level.

Recommendation 2: A Heat Production Efficiency Policy should be defined as one of the main axis of the EU Energy Roadmap and an essential element of the EU climate policy beyond 2020.

One of the key ways to help the EU achieve its energy efficiency and climate targets is to reduce heat consumption and related Greenhouse Gas (GHG) emissions. Heat represents almost 50% of the total energy consumption of Europe. Moreover, 70% of energy consumed by buildings is for heating purposes. These reductions can be achieved by promoting result oriented and cost effective solutions such as Energy Performance Contracts (EPC) and District Heating Networks (DHN), cogeneration, the use of biomass, of geothermal resources, of heat pumps and solar thermal.

Long term EPC contracts for heating and cooling services within buildings are a way to accelerate energy efficiency. The development of an ESCO (Energy Services Companies) Industry would trigger the creation of jobs. It would also encourage the financing of investment in energy performance projects, as returns would be secured by the long term commitments of operations specialists.

On the GHG emissions side, heat recovery from industrial units, power plants, data centres or even sewage systems (recovery involved in the circular economy), and its re-injection into DHN can also tap very important carbon-free energy sources. This is true also for the heat produced by waste incinerators. Furthermore, the substitution of imported hydrocarbons by locally produced biomass as fuel for these heat/electricity production units could result in massive reductions of CO₂ emissions and could diminish our energy dependency.

Thus, in addition to Energy Efficiency policies that usually focus principally on building insulation, strong policies on heat and cold generation and distribution remain to be defined and fostered. I therefore suggest

that energy performance contracting and district heating and cooling networks to be at the heart of the EU energy and climate policies. In particular, DHN that enable the most efficient and widespread exploitation of local renewable energy sources should be promoted as a priority.

District heating networks (DHN) have an essential virtue: the flexibility of their energy feed. They can serve the purpose of increasing the share of renewable energy in the EU energy mix in facilitating the rapid implementation of substitution for imported hydrocarbons.

Recommendation 3: The use of renewable energy sources, of waste heat, and of combined heat and power technologies (CHP) in district heating networks (DHN) should be encouraged.

Biomass is already the leading source of renewable energy in Europe but it is far from having reached its full potential, as, even being produced and consumed locally, it is an essential ingredient of circular economy in the field of energy. As a substitute for fossil fuels, it significantly reduces CO₂ emissions and shields users from the price fluctuations that are inherent to the oil and gas markets. Wood waste recycling is also potentially a major source of fuel and wise reforestation further contributes to CO₂ capture. The use of Solid Recovered Fuels (SRF) – see recommendation 5 – would also be a major plus as tens of tones of these essentially biomass derived products are potentially available in Europe.

District Heating Networks contribute to the most effective use of this natural resource, and other renewable sources of heat. More than 125 million European citizens (25% of EU population) live in areas where geothermal energy can be tapped in a cost effective manner and connected to DHN. Furthermore, DHN can also be fed with other - intermittent - renewable energies (in particular solar and wind energy electricity when in excess capacity), and they can be used as storage facilities for heat produced from those variable sources. Moreover, waste heat produced by industrial and power plants, data centres; sewage systems can be recovered and fed into DHN. In the official Roadmap crafted by EuroHeat & Power [3], 50%

3. <http://www.euroheat.org/Heat-Roadmap-Europe-165.aspx>

of the EU population could be covered by DHN in 2050, using an energy mix composed of 25% fossil fuels (75% today), 33% large scale heat pumps, 18% biomass and 24% spread between geothermal, solar thermal, waste to energy, and industrial excess heat. Such transition would generate €100Bn per year savings in primary energy spending.

Energy derived from biomass, SRF and incineration of waste can be used in combined heat and power (CHP) plants which provide electricity and heat. These plants are often more than twice as efficient as conventional power stations. Cogeneration allows cost savings, slashes down emissions and carbon footprint, ensures independent electricity supply, and reduces exposure to electricity price fluctuations. Capturing the identified economic potential for cogeneration in Europe – estimated at 110-120 GWe additional – will be instrumental to reaching the EU's strategic climate and energy goals, while underpinning job creation and being an engine to industrial competitiveness.

To take effect and produce the expected results, the targets must be accompanied by appropriate public policies. Installations supplied with renewable or recycled energy sources still need financial support from public authorities to compensate for usually high investment costs. In times of "energy poverty", public policies pursued by the Member States should encourage users to connect to the district heating networks and discourage disconnections. Finally regulatory mechanisms must be put in place to avoid cross-subsidies that artificially keep the price of electricity at low price levels at the expense of heat. Market players need a stable, appropriate carbon price to trigger a virtuous circle consisting in reducing the consumption of fossil fuels, stimulating the consumption of fuels from renewable sources and from waste, thus reducing the emission of greenhouse gases (GHG).

Recommendation 4: The EU Emissions Trading System ought to be reformed so that the resulting carbon price could provide sufficient incentives to spur investment in energy efficiency and renewable energy.

The principle of carbon pricing is crucial as highlighted in the conclusions of the latest report of the Panel on United

Nations Climate Change (IPCC) [4].

However, in light of the difficulties encountered by the EU Emissions allowances trading system, it is crucial to implement other instruments that will reduce its volatility, ensure that European companies receive incentives and have the capacity to engage in low-carbon investments. Finally, in the existing and newly created policy schemes, carbon prices should be applied to the largest number of sectors, including agriculture and transport, to avoid blatant discrimination between those operators that have to bear the burden of GHG reductions, and those that are exempted from the system. Also, in the energy sector (that is the one strongly affected by increases of carbon prices), any discrimination between operators based on the size and volume of energy consumption and production should be suppressed in order to avoid any competition distortion between the actors of the carbon market.

2. WASTE RECOVERY, AS SECONDARY RAW MATERIALS, SHOULD BE ONE OF THE NEW ECONOMIC MODELS, MORE SUSTAINABLE MODELS THAT WILL SPUR ECONOMIC GROWTH

Waste recovery is at the heart of the concept of Circular Economy; it must become one of the main pillars of the industrial Renaissance within the EU. The waste sector can and should contribute to increasing resource efficiency throughout the economy, provided appropriate policy measures are used. This is consistent with the EU flagship initiative for a resource-efficient Europe launched in 2011 under the Europe 2020 Strategy. The initiative supports the shift towards a resource-efficient, low-carbon economy to achieve sustainable growth [5].

The EU suffers from an irregular distribution of waste recovery facilities throughout its Member States.

Recommendation 5: Planning and incentivizing measures should be taken to correct imbalances in the distribution of EU waste recovery infrastructures, particularly in areas where waste is disposed of rather than recovered. In a more general way, the recovery and reuse of resources should be supported by tax incentives, to take in account their positive impact on externalities.

4. Carbon price being considered as the most effective tool for climate change mitigation. See "Climate Change 2014: Mitigation of Climate Change", <http://www.ipcc.ch/report/ar5/wg3/>

5. The flagship initiative for a resource-efficient Europe provides a long-term framework for actions in many policy areas, supporting policy agendas for climate change, energy, transport, industry, raw materials, agriculture, fisheries, biodiversity and regional development. This is to increase certainty for investment and innovation and to ensure that all relevant policies factor in resource efficiency in a balanced manner.

Source: <http://ec.europa.eu/resource-efficient-europe/>

The distribution of waste recovery infrastructures throughout the EU is far from even. For those areas that are either unequipped or poorly equipped, reaching the target figures put forward in the “Circular Economy Package” (published on 2 July 2014), supposes strong and appropriate incentivizing and supporting measures. This uneven distribution also applies to the environmental performance disposal facilities like landfills, some of which are equipped with efficient biogas recovery units and some are not, releasing massive quantities of methane in the atmosphere (hugely potent greenhouse gas, 25 times more than CO₂).

In a recent study requested by the European Commission [6], the EU financial assistance for large infrastructure projects in the waste management sector for the period 2007-2013 is evaluated at €6bn. The same study establishes that from 2014 to 2020, based on the different growth scenarios, needs for additional infrastructure to comply with waste-related directives will be in the range of €10 to 14bn through 2020. This gives the magnitude of the required investments in recovery infrastructure.

Provided planning rules and constraints for new recovery facilities are improved, operators like Veolia are ready to be involved in such projects. In this respect, we would encourage the Commission to help industry better identify which possible (financial or non-financial) incentives, for example unexpended EU Funds, could be used to unlock investments in recovery facilities in poorly equipped areas within the EU. Such incentives for new facilities for the treatment and recycling of waste should be tailored to the net number of jobs created and the amount of heat recovered now and previously untapped in both existing incineration plants and in solid recovered fuels treatment facilities.

The objectives of the European waste policy focus mainly on municipal waste, ignoring other resource-rich waste flows.

Recommendation 6: The European waste management targets should be extended to the non-hazardous industrial/commercial waste. In addition, to promote waste recovery, industrial standards should be set by type of product, requiring a minimum content of recycled material. A first step could apply to public tenders which could include such criteria.

In addition, to promote the recovery of waste, industrial standards should be set by product type, imposing a minimum recycled content. This could apply initially to public contracts which could incorporate these criteria.

In the case of the framework and landfill directives, which cover all waste categories, the targets both in the current legislation and in its proposed changes are only applied to municipal waste, which constitutes a third of the waste flow (complemented by construction and demolition waste in the case of the framework directive). In the targets set in these two texts, most of the waste flow from commercial or industrial sources is thus today almost entirely disregarded, although it represents twice the amount of recoverable materials and energy. Therefore Veolia advocates an extension of the target scope for both the framework and landfill directives to all non-hazardous commercial and industrial waste.

To reach these targets, there is a need to define a financially acceptable path for a transition towards an economy that fully exploits all types of recoverable waste. Such a transition towards more resource efficient economic models is one of the answers to the growing threat resulting from the volatility of raw material prices and increasingly from their sheer scarcity. Just to take the example of oil and gas, with the exception of the 1970s, prices (in real terms) were flat or fell throughout the 20th century, and then increased threefold since 2000. In the case of metals, as for most other commodities, prices also fell (in real terms) throughout the 20th century, and also tripled since 2000 [7]. All these variations have a considerable impact on the capacity of industry to anticipate its activity, plan its investments, and build stable business models [8].

Benchmarking of EU waste management policies is partly biased by differences in methodologies for evaluating waste recovery.

6. «Funding needs for the waste sector», carried out on behalf of DG Environment, by Milieu Ltd, published on 2 February 2011.

7. https://www.banquefrance.fr/fileadmin/user_upload/banque_de_france/Eurosysteme_et_international/zonefr/Evolution-de-la-volatilite-des-prix-des-matieres-premieres-sur-longue-periode.pdf

8. «Funding needs for the waste sector», carried out on behalf of DG Environment, by Milieu Ltd, published on 2 February 2011

Recommendation 7: Common waste statistics should be harmonized and a homogeneous definition of "residual waste" should be established at EU level in order to plan its targeted decline.

The EU should provide performance comparability through unified waste definitions and statistics, and particularly, make sure the Member States use a common definition of "residual waste" (i.e. non recovered waste) in order to allow the proper targeting and monitoring of its decline throughout the EU. A single EU method for carrying out and reporting waste statistics and for evaluating the recycling rate in each Member State, rather than the methods currently used, should also be imposed.

The existing Extended Producer Responsibility ("EPR") schemes can lead to competition distortions.

Recommendation 8: Common EU guidelines for Extended Producer Responsibility ("EPR") schemes should be specified.

In the last decades a great variety of EPR schemes has been created throughout the EU. In order to ensure fair competition and increased efficiency of these schemes, they should all function according to a set of minimum principles. Thus a clear and stable EPR framework should be provided in the form of EU guidelines, particularly for governance, cost effectiveness, monitoring and enforcement. These guidelines should require that financial contributions in the EPR schemes take into account eco-design criteria of the products that are put on the market, such as modularity, durability, reusability and recyclability.

3. MORE THAN EVER, THE EU WATER POLICY-SHOULD BE EVIDENCE-BASED AND PRAGMATIC IN ORDER TO PROTECT OUR WATER RESOURCES AND KEEP-UP WITH THE NECESSARY INVESTMENT IN OUR INFRASTRUCTURE. THIS IS THE ULTIMATE GUARANTEE FOR THE HUMAN RIGHT TO WATER AND SANITATION

In recent years, the European Union has been a battleground for ideological debates related to

the governance of the water sector. On one hand, drinking water was excluded from the concessions directive, aiming at relieving it from the transparency requirements of the directive. On the other hand, the very first European Citizens' Initiative was organised, allegedly aiming at the adoption of water as a human right, whilst concretely asking that water services to be excluded from internal market rules. Unfortunately, these debates have created more confusion than clarity. They are likely to slow down the deepening and widening of the EU water policy, although it is a flagship of the 'Acquis Communautaire'. Having in mind the diversity of approaches and strategies of the water community, more than ever the European Union should carry on its efforts to establish an evidence-based set of policies.

The quality of surface waters in Europe needs to be constantly supervised and enhanced

Recommendation 9: Protection of water resources from pollution and over-abstraction should be accelerated through definition and implementation of adapted regulatory tools at the EU level.

Even if the quality of surface waters in Europe has globally improved over the last years, the initial Water Framework Directive objective of good ecological status of European waters will not be reached either in 2015, or in 2020. Globally the status of aquifers has not improved and has even degraded in a number of regions. New molecules invented by the pharmaceutical and cosmetics industries keep appearing on the market. These products represent indeed progress, in particular on the medical side, but they generate new risks for human health and nature, once released in the environment. New industries such as those based on nanotechnologies generate new threats as their impact on health and the environment has not yet been assessed in depth. Firm actions must be undertaken in order to improve the situation and mitigate these risks. Full implementation of the existing regulations in the field of water and better coordination of related laws should be a priority for the EU. It should also promote the treatment at the source of hazardous substances, strengthen cooperation and dialogue with consumers,

with industries using or producing pollutants, and with organizations of water management. It is necessary, finally, to support the increased use of collection systems and sustainable wastewater treatment as complementary solution.

Waste water resources are not sufficiently exploited and recovered: an optimal management of those resources, as well as sewage sludge, can contribute to the higher resource efficiency, including energy savings.

Recommendation 10: In addition to ensuring compliance with existing regulations, the EU should nowadays focus on additional measures that will boost better use of wastewater and sewage sludge.

The following actions need to be taken to ensure an optimal use of waste water resources: promote water recycling through standards addressing health and environmental risks; support sludge re-use including for agriculture and help structuring market mechanisms for sludge-based products.

An instrument at EU level should aim at setting minimum quality standards based on scientific studies depending on the purpose of the reused water, in particular agricultural irrigation. In Europe, agriculture is also a significant user of water resources, essentially through irrigation, accounting for around 70% of total water use [9]. Legally binding minimum standards on water reuse for irrigation at EU level addressing health and environmental risks would also help reach acceptance among public opinion, and thus facilitate the creation of future opportunities to save water. Indeed, by recycling wastewater, we turn a nuisance into a resource, we increase productivity per cubic meter of water withdrawn from nature, and we decrease freshwater intake. It would also contribute to create a levelled playing field for food-products, imported or locally produced. Furthermore, artificial recharge of aquifers should be addressed. The need to develop wastewater and sewage sludge recovery implies to address the significant investment needs as well as issues related to governance.

Although protected under international human rights law, access to clean water and sanitation is still not self-evident in and outside the EU. Significant investments

in water infrastructure are necessary to make sure this people's right is respected

Recommendation 11: The implementation of the principle of sustainable cost recovery as specified in the EU Water Framework Directive should guarantee a better access to water and sanitation and help bridge the infrastructure and investment gap

According to the World Health Organisation, 19 million people do not have access to a source of drinking-water that is adequately protected, and about 100 million people still lack access to piped water in their homes in Europe (incl. Caucasus) [10]. Both public and private operators contribute to providing citizens with the access to safe water, under the responsibility of competent public authorities

A major part of the cost of water provision is linked to the way infrastructure necessary for service delivery is maintained, refurbished and expanded. This infrastructure comprises above ground assets - potable water plants and waste water treatment plants - and underground assets - potable water distribution networks and sewage networks. The average cost of replacement of these two categories of assets is in a ratio of ¼ and ¾ respectively. Given the invisible nature of the underground assets it is quite frequent that the investment gaps are wider there. Those investments needs are considerable, especially in Central and Eastern Europe (€200 billion necessary to catch up with investments to bring these countries to comply with the EC directives [11]), but also in Western Europe (€90 billion over the next 5 years to rehabilitate water infrastructure).

Considering the huge investment needs, further expansion and modernization of existing water-related infrastructure requires adequate financing instruments. Recourse to such funding mechanisms, that should be available to all operators regardless of their nature, stems from the implementation of the principle of sustainable costs recovery, as specified in article 9 of the EU Water Framework Directive [12]. This is all the more urgent in those Member States of the EU where citizens are not capable of supporting any additional water tariff increases.

9. The scale and importance of irrigation is significantly greater in the southern Member States but far from negligible in most northern Member States. In the south, irrigation accounts for over 60 % of water use in most countries, while in northern Member States it varies from almost zero in a few countries to over 30 % in others.

Sources:

<http://ec.europa.eu/environment/agriculture/pdf/irrigation.pdf>

<http://www.lenntech.fr/applications/irrigation/irrigation/eau-irrigation.htm-#ixzz3BimTXCZl>

10. Source : <http://www.euro.who.int/en/health-topics/environment-and-health/water-and-sanitation/water-and-sanitation>

11. "Building New Europe's Infrastructure* - Public Private Partnerships in Central and Eastern Europe":

<http://pwc.blogs.com/files/building-new-europe39s-infrastructure--full-publication.pdf>

12. "Member States shall take account of the principle of recovery of the costs of water services, including environmental and resource costs, having regard to the economic analysis conducted according to Annex III, and in accordance in particular with the polluter pays principle". 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. See: http://eur-lex.europa.eu/resource.html?uri=cellar:5c835afb-2ec6-4577-bd8-756d3d694eeb.0004.02/DOC_1&format=PDF

Provision of water services is, by its very nature, a local activity. For this precise reason, it is difficult to compare and assess the quality of those services across various regions and countries.

Recommendation 12: Open benchmarking should be defined and open for all to guarantee transparency and accountability of water services

Indeed, the consultation on the quality of drinking water in the EU, that kicked off a debate on the "benchmarking" of water services in March, is an attempt by the Commission to answer the European Citizen Initiative Right2Water. The word benchmarking being used essentially for voluntary and confidential initiatives of performance improvement between operators the term Key Performance Indicators (KPIs) seems more suitable. Such KPIs would aim at a higher level of transparency, providing EU citizens with data

on the quality of their drinking water, and on the performance of water services they benefit from.

Transparency KPIs should be established in Member States where they do not exist and should be harmonised so as to ensure a minimum level of comparability among water services. More importantly, these systems should be made fully transparent and accessible to the public, as it is the case in the UK and France, to enable water-users and citizens to get better performances from their water service suppliers. The implementation of the new measures would require all public water systems, all water and waste water operators, public water authorities, irrespective of their nature, to disclose compulsorily key performance indicators.

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