

Roundtable on Financing Water

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6th meeting, 7-8 December 2020, virtual meeting
Emerging impacts of the COVID-19 crisis and implication for water-related investments
Background Paper

Background

The COVID-19 pandemic has severely impacted economies, within the EU and worldwide. The consequences of the COVID outbreak have led to historic economic disruptions including significant downturn in economic activity, rising unemployment and increasing public debt. In twelve European member states, public debt levels are projected to rise by more than 20% points of GDP between 2019 and 2021¹ (OECD, 2020_[1]). These developments are expected to increase financial pressure on water service providers with implications for water-related investments in the region. Pressures on public budgets exacerbate the challenge for governments to finance the necessary investments to reach compliance with the EU water *acquis*. At the household level, real per capita income in the OECD is expected to decline by 10% in 2020 (OECD, 2020_[1]), intensifying affordability constraints for households and reducing possibilities to raise tariffs to ensure cost recovery. Globally, revenues from water tariffs - generally a stable income stream for water utilities - are expected to drop by 15% owing to a reduction in water consumption and suspended action against non-payers. Overall, more than half of the reviewed utilities of a global survey by GWI plan to mitigate the impacts of the income losses by reducing on capital projects and by reducing operational outgoings² (GWI, 2020_[2]). The COVID crisis could hence reduce the availability of the different sources of finance for water-related investments.

At the same time, the EU as well as numerous European national governments developed ambitious recovery plans to mitigate the negative impacts of the pandemic and to relaunch their economies. EU leaders have agreed on a large-scale recovery package, consisting of two major elements: repurposing parts of the regular EU budget (or multiannual financial framework) of EUR 1.1 trillion over seven years and the “Next Generation EU” Fund of EUR 750 billion specifically set up to help countries recover from the COVID-19 recession. The European stimulus package, together with the national recovery programmes, could provide additional funding for water-related investments, especially where recovery funds are tied to climate or sustainability targets. This paper provides a brief overview of recent developments and explores how water-related investments could feature as part of recovery efforts and how the recovery can be used to increase resilience of water service providers.

Questions for discussion

(1) How can water-related investments contribute to the “green and resilient recovery”? Which opportunities or barriers could emerge? How can projects be prepared and designed to ensure relevance and eligibility?

(2) What can water utilities learn from the underlying fragility revealed by the COVID-19 crisis in terms of resilience? Which strengths and weaknesses were revealed during the crisis? Which opportunities does the crisis offer?

¹ assuming a double-hit scenario

² based on a survey with 44 utilities globally in May 2020.

The financial impact of COVID-19 on water utilities

Water utilities' financial situation has been strongly affected by the COVID-19 pandemic. Reduced economic activity during the lockdown decreased industrial and commercial water consumption by 27% on average² (GWI, 2020^[2]), generating revenue shortfalls for water utilities. For instance, in Italy utilities have faced a decline of 5% to 15% (of annual revenues) (Latorre, 2020^[3]). Additionally, regulators have put a high amount of pressure to adjust tariffs, reacting to reduced household income, rising unemployment and reduced budgets of commercial actors. Out of 118 utilities in European cities, 65 introduced measures in response to the COVID-19 outbreak, such as payment assistance, postponed tariff increases or tariff reductions and no shut-off policies (Cowley et al., 2020^[4]). Table 1 gives an overview of the number of utilities having taken COVID measures in European cities. Looking at tariff levels in Western European cities, tariffs stagnated in 2020 with a 0.2% increase since 2019, differing from the typical annual rise of 1-2% since 2011. One of the main drivers of this development was the German response to the COVID-19 crises, reducing the sales tax for water from 7% to 5%. In Eastern European cities, little change in tariffs can be attributed to the COVID pandemic and only 3 out of 22 cities reduced tariffs compared to 2019 levels (Cowley et al., 2020^[4]). Figure 2 visualises the changes in water tariffs across European cities.

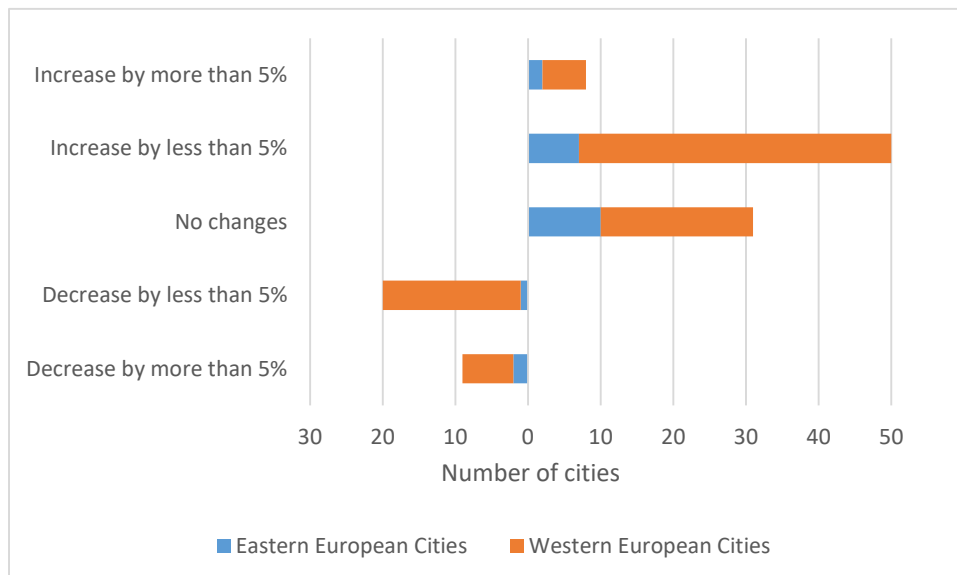
Table 1. COVID-19 responses in European cities

COVID response	Tariff reductions	Tariffs frozen/ postponed increase	No shut-offs/ payment assistance/ deferred payment	No measures
Number of cities	17	13	40	53

Note: A number of cities have more than one COVID-response and are counted in each corresponding category. The total number of cities is 118.

Source: Authors, data from (Cowley et al., 2020^[4])

Figure 1. Change in tariffs between 2019 and 2020



Note: Combined bill (water, wastewater and storm water) in 96 Western and 22 Eastern European utilities

Source: Authors, based on (GWI, 2020^[5])

Overall, low water consumption, reduced billing and pricing and pandemic-related increased operation costs due to personal protective equipment and workplace adjustments, as well as service reforms, e.g. the expanded provision of public standpipes, water tankers and handwashing facilities, have aggravated the financial situation of water utilities (World Bank, 2020^[5]). United Utilities in the UK, for example, expects revenues to drop by 5% in the first half of the current financial year compared to the 2019/20 period (GWI, 2020^[6]). Already in their financial reports end of March 2020, several cities in the UK documented significant increases in debt, with five utilities showing double-figure percentage increases (GWI, 2020^[7]). According to a Bluefield study, the financial impact of COVID-19 on drinking water utilities in the US is likely to be approximately USD 13.9 billion (representing a 16.9% financial impact on the drinking water sector), added by another USD 1.6 billion due to expected future losses through deferral of planned water rate increases (bluefield research, 2020^[8]). However, losses in revenues can vary significantly across utilities and regions. While a sample of 40 US utilities expect their water and wastewater revenues to decline by merely 0.72% between 2020 and 2021 (GWI, 2020^[9]), Irish Water has estimated that the negative impact of COVID-19 on its finances will exceed €110 million in 2020 (GWI, 2020^[10]).

The financial impacts on utilities are likely to delay and reduce capital expenditures to help manage cash flows during the crisis. Capital expenditure spending in the US, for example, is expected to decline by 4% for the 2019-2021 period (GWI, 2020^[11]), and by 2% between 2020-2028. When looking at the correlation between GDP reductions and spending on water infrastructure in the US, the COVID-related recession suggests investment to fall well under USD 52 billion (or by 10% in 2023) as new and large capital projects are postponed (bluefield research, 2020^[8]). Also in Europe, infrastructure projects have faced delays due to the COVID outbreak and lockdown. Large-scale infrastructure projects, such as deep tunnel sewers and water transfer schemes have been impacted the most, since governments focused on emergency recovery for the economy. In Ireland, for instance, the Greater Dublin Drainage Project was due to start the procurement process this year, but has not advanced since the reception of the planning permission in November 2019 (GWI, 2020^[12]). Reductions in capital expenditures can have cascading effects on the economic activities in the area served by a utility. Further, reductions in capital expenditures will hamper the sector's ability to address future capital infrastructure needs in light of decaying infrastructure, demographic developments and to reach compliance with the EU water *acquis* (see background paper from session 2).

Investment in water infrastructure could play an important part in the recovery of national economies. Since water services are typically capital intensive, investments can have a strong economic impact and can help build resilience for future shocks. The utility Canal Isabel in Madrid plans to tender construction, operation and maintenance and other contracts with a total amount of EUR 1.7 billion in 2020 and 2021, supporting the regional economic recovery from the COVID crisis (GWI, 2020^[13]). Similarly, the European Bank for Reconstruction and Development has created the emergency Vital Infrastructure Support Programme in April, to ensure the provision of vital services as well as protecting the progress towards the provision of green, sustainable infrastructure in the medium and long term (EBRD, 2020^[14]). Broader water-related investments, such as investments in watershed management, ecosystem restoration, regenerative agriculture and food systems, represent opportunities to contribute to a green and resilient recovery. Such activities have the potential to create jobs quickly and reduce water scarcity and flood damage, protect biodiversity and enhance ecosystem services, thus generating long-term benefits and increasing resilience (GWSP, 2020^[15]).

The EU Recovery package: Linkages to water

On a European level, EU leaders have agreed on a historic recovery package as a resolute response to the COVID-19 pandemic and related economic and social consequences. The recovery package consists of two major elements: repurposing parts of the regular EU budget (or multiannual financial framework) of

EUR 1.1 trillion over seven years and the *Next Generation EU* Fund of EUR 750 billion specifically set up to help countries recover from the COVID-19 recession (European Commission, 2020^[16]).

Ensuring that these efforts contribute to a green and resilient recovery that delivers broader benefits over the long-term will be crucial. Member countries committed to ensuring that 30% of their total expenditure from the recovery fund and the next EU budget would be dedicated to climate action. In line with the overall aims of the package, there is scope for water-related investments to contribute to a resilient and environmentally sustainable recovery. Specifically, the following selected elements of the EU recovery package could potentially include funding that contributes to water security:

- The **Recovery and Resilience Facility** of EUR 560 billion provides loans and grants to EU member states and defines that the according plans need to “significantly contribute to addressing the green and the digital transitions” and the supported measures should “avoid adverse impacts in climate and the environment” (European Commission, 2020^[17]).
- EUR 15.3 billion have been made available to upgrade the **InvestEU programme**, containing the new Strategic Investment Facility, which, with this top-up, can generate up to EUR 150 billion of investments for the green and digital transitions (European Commission, 2020^[16]).

In the past, the European Fund for Strategic Investment has supported water-related projects, for example through a EUR 330 million loan for a flood defence project in the Netherlands or a EUR 200 million loan for a water and waste water infrastructure project of one of the utilities in Italy (EIB, 2019^[18]; EIB, 2018^[19]). This upgrade could support similar water-related investments in the future.

- The **European Agricultural Fund for Rural Development (EAFRD)** has been reinforced with EUR 15 billion to support structural changes necessary in line with the European Green Deal (European Commission, 2020^[16]). One of the aims of the EAFRD is the support of agri-environmental farming practices, which can include measures to improve water quality or water resource management.
- The **Cohesion Policy programmes** will be topped up by EUR 55 billion between now and 2022. One of the Cohesion Policy’s objectives is to support regions to preserve their natural environment and to finance water and wastewater infrastructure. Thirteen percent of its funds between 2014 and 2020 were dedicated to environment and resource efficiency and 6% to climate change adaptation and risk prevention (European Commission, 2020^[20]). The financial reinforcement of the programme could support water-related projects in the future.

The opportunity for additional funding for water-related investments through recovery packages will crucially depend on the extent to which they address environmental and social objectives. The detailed criteria for approval of loans and grants from the above-mentioned EU Recovery and Resilience Facility to member states are still yet to be decided.

At the country level, the French recovery program *France Relance*, for example, includes the pillar ‘Ecological development’, which suggests several water-related infrastructure investments (see Box 1).

The COVID pandemic could also stimulate a push towards the digitalisation and modernisation of the water sector. Solutions such as remote monitoring of critical treatment and conveyance assets or process automation and optimizing platforms could increase resilience against future shocks. Digitalisation in the water sector could enable efficiency gains and cost savings, allowing better use of existing assets and financial resources.

Box 1. The French Recovery Package *France Relance*: a role for water-related investments

In September 2020, the French Government published its EUR 100 billion recovery plan *France Relance* in response to the COVID-19 crisis. The recovery package aims at creating jobs and

relaunching the French economy to 2019 growth levels by 2022, focussing on the three pillars: 'ecological development', 'competitiveness' and 'cohesion'. Under the pillar 'ecological development', endowed with a budget of EUR 30 billion, several categories and proposed investments include water-related investments, such as:

- The EUR 350 million programme to improve fresh water distribution infrastructure, and management and treatment of rainwater in metropolitan and overseas French territories. Examples are renovation and modernisation works for freshwater networks, such as leakage reduction measures, or the installation of dehydration stations for communities with limited possibilities to dispose of their sewage sludge.
- The EUR 250 million programme 'Biodiversity, risk prevention and reinforcement of resilience', aiming at the maintenance of aquatic, maritime and littoral ecosystems. Examples are restoration works for mangrove conservation at the sites of Jarry-Houelbourg in the French Overseas Department Guadeloupe and a dam restoration project, fostering ecological connectivity for fish in Rhinau and Markholsteim at the Rhine river.
- The EUR 250 million programme for the renewal and development of necessary agri-environmental equipment for an agri-environmental transition and for the adaption to climate change. This includes investments for equipment helping to deal with climate risks, such as droughts, frost and hail or equipment helping to reduce the use of herbicides.

Source: French Government (2020), France Relance. https://www.economie.gouv.fr/files/files/directions_services/plan-de-relance/annexe-fiche-mesures.pdf

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