

Better tariffs for water services from an economic, social and environmental perspective

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Executive Summary

This Policy Brief analyses solutions to improve the tariffs of water supply, wastewater and storm water services in Portugal, aligning them with international best practices and framing them with the recommendations of the Strategic Plan for Water Supply, Wastewater and Storm water Management 2030 (PENSAARP 2030). The document identifies main challenges and establishes guiding principles for tariff formulation. Based on these references, it critically evaluates the regulatory policy, the current practice in Portugal and international practices, proposing with solid evidence a comprehensive set of measures, namely to improve tariff structures, reduce excessive cross-subsidies, correct asymmetries between user segments, adapt fixed and variable components to real costs, strengthen social tariff mechanisms, introduce coherence in the integration of storm water, modernising taxation and clarifying the valuation of municipal water uses.

Recommendations

1. Maintain the indexation to water consumption and the distinction between domestic and non-domestic, but reducing cross-subsidies.
 2. Simplify the approach to non-domestic users, distinguishing only Administration/NGOs and Companies.
 3. Maintain the split tariffs, but with harmonized rules and costing, including the differentiation of the fixed component.
 4. Maintain the blocks for domestic users, with future simplification to three, and with sanitation indexed to consumption, in a simpler calculation logic.
 5. Promote PAYT (Pay-as-you-throw) tariffs for waste and a storm water fee based on the impermeable area.
 6. Make the social tariff universal and automatic, and seasonal tariffs applied mainly to non-domestic households and in areas with water scarcity.
 7. Impose harmonisation and binding of the regulatory authority's guidelines on ancillary services, including the installation of connection pipe and the cleaning of septic tanks.
 8. Promote greater equity in environmental taxation and align the VAT on sanitation and waste with the reduced rate applied to the water supply.
- Billing municipal consumption in full and valuing them for the purposes of determining the coverage of expenses and billed water, eliminating cost transfers to other users.

Policy brief recipients

This Policy Brief is addressed in general to all public and civil society entities with responsibilities and interests in the area of governance, public policy and management of water supply and sanitation services, and in particular to the Portuguese Water and Waste Services Regulatory Authority (Entidade Reguladora dos Serviços de Águas e Resíduos, ERSAR), collaborative institution of this initiative.

Introduction and Framing of the Problem

The objective of this Policy Brief is to identify and analyse innovative solutions that can contribute to improving the application of tariffs for water supply, wastewater and storm water management services in Portugal (hereinafter referred to as water services), with reference to international best practices.

More than an exercise for immediate application, the proposals presented aim to motivate decision-makers to act, aware that some measures may be implemented in the short term, while others, due to their more structuring nature, will require time, maturation and commitment to become a reality.

This reflection covers different types of users, uses and services, seeking to reconcile the economic and financial sustainability of the water utilities with the guarantee of the economic accessibility of users. At the same time, it is important to promote greater equity between users and encourage a more efficient and sustainable use of water, in response to the current challenge of increasing water scarcity associated with climate change.

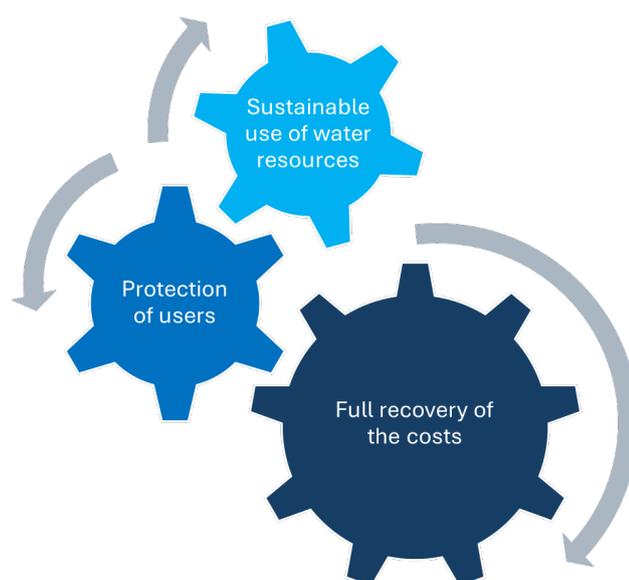
The Portuguese Strategic Plan for Water Supply and Wastewater and Stormwater Management 2030 (PENSAARP 2030) recognizes the tariff regime as an essential and priority instrument to generate positive impacts

on the Plan's four overarching objectives — effectiveness, efficiency, sustainability and added value. This Policy Brief aims to contribute to the implementation of Measure M18 (Adoption of a tariff structure that ensures equity and affordability) of this Plan.

The main challenges in the structuring and implementation of tariffs focus on:

- Ensure the full recovery of the costs associated with the provision of services, while ensuring the quality of the service and the economic and financial sustainability of the water utilities, within a framework of efficiency and good management;
- To ensure the protection of users, in a monopoly situation, promoting affordable accessibility to services and ensuring universal access for citizens, under socially fair and balanced conditions;
- Promote the sustainable use of water resources, reflecting in tariffs the costs and benefits associated with their use, encouraging good consumption practices and discouraging waste and excessive consumption, in the face of the challenge of climate change and growing water scarcity.

Figure 1 – Main challenges in formulating tariffs for water services



Source: LIS-Water

Identifying the Principles to Follow

The formulation of tariffs for water services must be based on the following principles:

Principle of recovery of total expenses

Revenue shall ensure that all costs associated with the provision of the services — operational and capital, including their remuneration — are recovered. This recovery should be carried out mainly through tariffs for water supply and wastewater services, without prejudice to the use of fees for storm water services. Of course, any transfers must be deducted, namely through existing European funds. This ensures the economic and financial sustainability of the water utilities, allowing them to maintain the quality of service and plan future investment without resorting to excessive external financing.

Principle of promoting allocative efficiency in the use of resources

The tariff system should encourage an efficient allocation of water and sanitation services, allocating resources where they generate the greatest social value. This means reflecting the real costs of production and distribution in prices, differentiating them appropriately according to their uses, discouraging waste and promoting conscious consumption practices.

Principle of consumer protection

Users must be safeguarded against abuse and discrimination, especially in monopoly situations, by guaranteeing them basic rights of access to these essential public services, as well as the non-application of excessive tariffs that lead to the appropriation of scarcity rents by water utilities. This principle implies transparency in the definition of tariffs, the existence of effective complaint mechanisms and the provision of clear information about the service.

Principle of fairness between users

Tariffs must not discriminate between users on the basis of their subjective characteristics, but essentially on the basis of the objective characteristics of their use of the service.

Principle of physical and affordable accessibility for families

All citizens should have effective access to water and sanitation services, where their location allows it and regardless of their economic situation. Affordability means that tariffs should not jeopardize the essential income of the most vulnerable households, allowing them to meet their basic water service needs.

Principle of internalization of environmental externalities

The environmental costs associated with the abstraction, treatment and distribution of water, as well as the benefits of protecting and conserving water resources, should be reflected in tariffs. This encourages sustainable behaviours, such as reducing consumption, reusing water, and protecting ecosystems, contributing to the integrated management of resources.

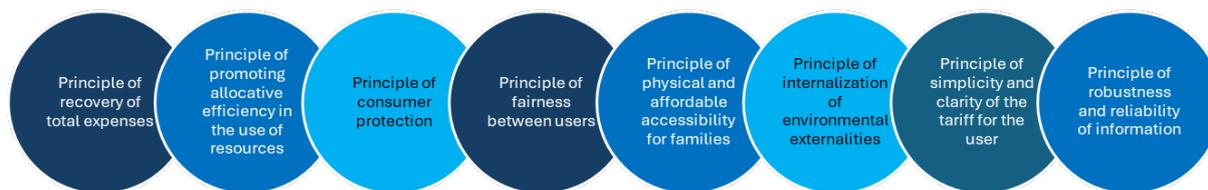
Principle of simplicity and clarity of the tariff for the user

The tariff must be understandable and transparent, so that users understand how their consumption influences their charges. Complex or opaque tariff structures make it difficult for the consumer to make rational decisions and reduce confidence in the water utility.

Principle of robustness and reliability of information

Tariffs must be based on variables with a high degree of reliability for the water utility, avoiding situations of possible abuse or fraud.

Figure 2 – Principles for the formulation of tariffs for water services



Source: LIS-Water

Policy Options and Recommendations

Indexation of the tariff to water consumption

The indexation of the tariff to the measured water consumption is a relevant factor because it allows the payment to be directly related to the volume actually consumed, promoting equity and encouraging the efficient use of water.

The existing regulatory policy in Portugal seems appropriate, as it advocates the indexation of the supply tariff to the measured water consumption.

The usual practice in Portugal can be considered fully satisfactory, insofar as it adopts this doctrine in an almost universal way.

It is in line with an international practice that is also almost universal.

It is therefore proposed that this practice be maintained.

Differentiation of the tariff between domestic and non-domestic users

The differentiation of the tariff according to the type of user is a relevant factor because it reflects political options regarding different social valuations of the use of water services by different segments of users (domestic, non-domestic, public, industrial).

The existing regulatory policy in Portugal seems appropriate, as it advocates the differentiation of the tariff according to the subjective characteristics of domestic and non-domestic users, in line with most international practices.

The usual practice in Portugal can be considered appropriate insofar as this subjective differentiation is almost universal.

However, even recognizing a rationale of merit goods (positive externalities in terms of public health resulting from universal access to urban water services) for some cross-subsidization between the non-domestic and domestic segments, the current degree observed in Portugal (an average discount of 40%) seems excessive, given the analysis of international good practices.

It is proposed to maintain the differentiation of the tariff according to the subjective characteristics of domestic and non-domestic users, but it is suggested, however, to consider increasing the coefficient of goods of merit to a value between 70% and 80%, more in line with international good practices, which means reducing the degree of cross-subsidization (discount) of domestic customers by non-domestic customers to between 20 and 30%.

Differentiation of the tariff between different types of non-domestic users

The differentiation of the tariff according to the type of user is a relevant factor because it reflects political options regarding different social valuations of the use of water services by different segments of users (non-domestic, public, industrial).

The existing regulatory policy in Portugal seems appropriate (it recommends that these users be treated uniformly from a tariff point of view), in line with the analysis of good international practices.

However, the actual practice in Portugal can be considered unsatisfactory, as a subjective

differentiation persists, often characterized by a great diversity of typologies.

Eventually, assuming that arguments of fiscal parity (combined effect of Value Added Tax - VAT and Corporate Income Tax - CIT) are valid, one could consider a decomposition of the universe of non-domestic customers into two segments:

- Administration (Central and Local) and Civil Society Organizations (NGOs);
- Companies: With a higher tariff than for the Administration and NGOs, which in the Portuguese case would correspond to a differential of 32.5%, resulting in identical post-tax charges.

Fixed component in the tariff

The fixed component in the tariff is a relevant factor in that it addresses the question of whether a user should be held responsible for a charge, regardless of the level of use he makes of water services.

The existing regulatory policy in Portugal seems appropriate, as it recommends fixed components in the supply and sanitation tariffs.

The actual situation in Portugal can be considered satisfactory, insofar as this doctrine is adopted almost universally.

It is in line with most international practices, where two-thirds of the cities analysed also apply fixed tariffs.

It is therefore proposed that the universality of the application of two-part tariffs be maintained in Portugal, that is, with fixed and variable components.

Notwithstanding, the weight of the fixed component of tariffs in Portugal, in global average terms, is visibly high (about 30%), both in supply and sanitation, in addition to showing great dispersion of values.

Thus, it is proposed to create calculation rules that guide and introduce greater objectivity, economic rationality, harmonization and transparency in the determination of these tariffs, in line with the good practices analysed, both international and adopted in the Portuguese energy sector (electricity and natural gas), thus avoiding the application of excessive values.

A specific costing study is proposed, resulting in values for the fixed tariffs of supply and sanitation services adjusted to the "last mile costs" effectively borne by the Portuguese water utilities.

Differentiation of the fixed component between users

The differentiation of the fixed component between users is a relevant factor because it assesses the extent to which the fixed portion should be differentiated according to variables such as meter gauge, type of user or connection size, reflecting different levels of service cost.

The existing regulatory policy in Portugal seems appropriate, as it recommends that this only occurs in the supply service provided to non-domestic users, depending on the capacity of the meter installed.

The usual practice in Portugal can be considered satisfactory in the case of domestic customers, since there is no differentiation of fixed tariffs.

It is proposed that the differentiation of the fixed component of supply only between non-domestic users should be maintained in Portugal, contrary to the practice in many countries of eliminating this type of differentiation.

However, it is proposed to create calculation criteria that guide and introduce greater objectivity, economic rationality and transparency in the differentiation of fixed supply tariffs between non-domestic users, namely avoiding great dispersion and the application of manifestly excessive values.

Within the framework of the specific costing study recommended above, it is proposed that one of its aspects be the quantification of the extent to which the costs of the water utilities are impacted by larger nominal diameters of the installed meters and their extensions.

Differentiation of the variable component function of consumption

The differentiation of the variable component according to consumption, with the adoption of progressive tariffs or by blocks, is a relevant factor because it affects the incentive structure for the marginal increase in consumption by users.

The existing regulatory policy in Portugal seems appropriate, as it advocates the differentiation of the variable component of the service to domestic customers according to the volume consumed, in line with most international practices.

The usual practice in Portugal can be considered satisfactory regarding the use of increasing blocks for domestic customers, given their almost universality of application.

However, the degree of progressiveness in the transition between blocks appears excessive in the light of the analysis of international best practices.

Likewise, the current recommendation of the regulatory authority not to differentiate the variable tariff applied to non-domestic users according to the volume consumed is acceptable.

However, the degree of compliance with the existence of a single block in the non-domestic tariff is only incipiently satisfactory, as this is observed by only 58% of the water utilities.

In summary, it is proposed to maintain in Portugal the use of increasing blocks for domestic customers, as well as the non-differentiation of the variable tariff applied to non-domestic users according to the volume consumed.

It is, however, pertinent to consider simplification to only three blocks in the long term: a first block of up to 15 m³/month, which covers the vast majority of domestic consumption; a second block for higher consumption (unit value equivalent to the Administration and NGO); and a final block (greater than 25 m³/month, or higher, equating its unit value to companies), to penalize manifestly excessive domestic consumption.

Indexation of the variable wastewater tariff to consumption

The indexation of the variable wastewater tariff to water consumption is a relevant factor because it reflects an assessment of the degree to which supply and sanitation services are considered inseparable.

The existing regulatory policy in Portugal seems appropriate, as it advocates the indexation of the variable sanitation tariff to water consumption.

The effective practice of tariffs in Portugal can be considered satisfactory, given the almost universality of this indexation.

It is therefore proposed that this practice be maintained in Portugal, in line with the almost universality of international practices.

It is proposed, however, that the variable component of the sanitation service should be determined by applying a percentage to the variable component of the supply service, simplifying the process, as is already the case in some cities and countries.

Indexation of the variable waste tariff to water consumption

The indexation of the variable waste tariff to water consumption is a relevant factor because it raises the question of the reasonableness of its use as a pragmatic basis for charging waste services when there are no direct measurements of production.

The most recent legislation in Portugal seems appropriate, as it does not allow the indexation of the variable tariff for urban waste management to water consumption.

The effective practice of tariffs in Portugal can be considered unsatisfactory in view of the most recent legislative framework, given a predominant application of this indexation. However, it should be noted that this practice was explicitly provided for and allowed in the previous normative and regulatory framework.

International practices clearly go in the direction of not indexing the variable tariff for urban waste management to water consumption, with cases like the Portuguese one being rare in the world.

It is proposed that, to comply with the provisions of the general waste management regime, the use of PAYT tariffs for the management of urban waste should be promoted.

It is admitted that the billing of the waste management service may, however, continue to be a portion of the so-called "water bill".

Integration of storm water in the sanitation tariff

The integration of storm water in the sanitation tariff is a relevant factor because it reflects the political option of internalizing the costs

associated with storm water drainage, or of considering its management as a public good.

The existing regulatory policy in Portugal seems ambiguous, as it does not clearly define the possibility of integrating storm water management costs into the sanitation tariff.

The usual practice in Portugal is generally unsatisfactory due to the ambiguity of the regulatory framework, heterogeneity of practices and difficult visibility on what is happening on the ground, in each specific case.

In international terms, in cities where an explicit and autonomous charge for storm water management is made, the impermeable area of the property is clearly the most frequently used indexation variable, and cases of indexation of this fee/tariff to water consumption are very rare.

It is proposed that the revenues come from the sharing between the municipality (as a large generator of storm water) and the users. The municipality's revenues must come from the municipal council's budget and the users' revenues must come from the storm water management fee depending on the degree of impermeability of the property.

It is proposed to carry out a prior feasibility study of indexation to the impermeable area of the property.

It is considered that the autonomous collection of storm water management should legally assume the figure of a fee, as it is not a transaction of a contractual nature.

It is admitted that this billing may, however, be a portion of the so-called "water bill".

Tariff for low-income families

The tariff for low-income families is a relevant factor because it reflects the political option to go or not go beyond the traditional mechanisms of income redistribution and social policy, intervening in tariffs with the aim of ensuring affordability for the most vulnerable families.

The existing regulatory policy in Portugal seems appropriate, as it advocates the offer of social tariffs by water utilities for low-income families.

Within the European Union, it is observed that the Member States are divided, in similar

proportions, between those that implement and those that do not implement social tariffs in urban water services. Indeed, some States consider this type of instrument unnecessary considering the way they positively assess the effectiveness of their traditional social protection systems.

The usual practice in Portugal can be considered moderately satisfactory due to the increasing introduction of social tariffs by the water utilities.

The magnitude of the benefit typically provided by social tariffs (average discount of 50%) also seems appropriate and materially relevant for the beneficiaries.

However, the current degree of adherence to social tariffs is still clearly below what is expected and desirable.

It is proposed to adopt a universal and automatic system such as the one implemented in the electricity supply and natural gas distribution sectors, in which the discount provided by the social tariff is compensated with the other customers of the services.

Water service tariff for demand management

The tariff of the supply service as a demand management variable is a relevant factor because it considers the use of price as an instrument to influence consumption behaviours throughout the year, seeking to adjust demand to the availability of water resources.

The existing regulatory policy in Portugal seems appropriate, insofar as it allows but does not impose the application of seasonal tariffs.

The usual practice in Portugal can be considered substantively incipient in this area, as can the case internationally.

Given the characteristics of demand, the technical constraints associated with the traditional measurement of consumption, as well as the potential for public and media contestation in the application of this mechanism to domestic users, it is proposed to use it preferentially in non-domestic consumption.

Notwithstanding, its use can be extended to domestic users, with less elasticity of price

demand, with a reference of increase of up to 30% depending on the context.

The case of the Algarve region is a situation in which the dimensioning of the infrastructures for a situation of peak use during the summer season is a solid basis for the variable supply tariffs to be increased during this period.

Auxiliary/ related services subject to autonomous pricing

The auxiliary/related services subject to autonomous pricing are a relevant factor because they equate transparency and cost coverage in complementary services (supply cut, inspection, water analysis, etc.).

The existing regulatory policy in Portugal seems relatively adequate, as it explicitly identifies the auxiliary/ related services subject to autonomous pricing (e.g. change of the location of the meter and extraordinary verification of the meter resulting from the user's request).

The usual practice in Portugal can be considered unsatisfactory, given the enormous heterogeneity of designations adopted for the same service, values practiced and compliance with the recommendations of the regulatory authority.

It is therefore proposed to promote the homogeneity of concepts, designations, billing rules and ranges of values applied in the universe of auxiliary services.

It is proposed that the regulatory authority develop a costing study, which may result in benchmarks of reasonable values for these tariffs.

In the specific case of the service connection, given their impact on the economic accessibility of urban supply and sanitation services, it is proposed that the recommendation of the regulatory authority regarding the non-billing of the extensions (up to 20 meters) should be regained the character of a binding standard.

Septic tank cleaning service tariff

The tariff for septic tank cleaning services is a relevant factor because it considers how to ensure the universality of the sanitation service in areas not served by fixed networks.

The existing regulatory policy in Portugal seems to be generally adequate, as it provides for a tariff for septic tank cleaning services to better safeguard the universality of access to safe sanitation services in the event of unavailability of fixed networks.

However, the usual practice in Portugal can be considered moderately satisfactory, since a third of the water utilities do not adopt the provisions of the regulations.

It is recommended that, in the context of the future tariff regulation for water services, the current regulatory provisions will be strengthened.

Environmental taxation in water service tariffs

Environmental taxation in water service tariffs is a relevant factor as it is a potential instrument of environmental policy.

The existing regulatory framework in Portugal seems adequate, reflecting the transposition of the European Union's Water Framework Directive, with the introduction of the water resources tax.

The usual practice in Portugal can be considered satisfactory, due to the universalization of its application.

However, it is proposed to improve the equity in the contribution of the urban sector vis-à-vis, for example, the agriculture and thermopower sectors.

It is also proposed to ensure greater visibility as to the correspondence between the contribution of water services to the Environmental Fund and the return of this amount to the sector.

It is also worth questioning the effective added value resulting from the explicitness of the values resulting from the repercussion of the water resources fee on the bills to end users of urban supply and sanitation services, given the small magnitude of the values in question. It should be remembered that this is not the case with the regulation and quality control fees for water for human consumption settled by the regulatory authority.

It should be noted that safeguarding transparency concerns and clear consumer information does not mean that this information

should be included in every invoice. It is considered that, for example on an annual basis, a detailed information leaflet should accompany the invoice.

Value added tax on water services

The value added tax (VAT) of water services is a relevant factor as it can create differentiated situations between services and depending on the management model of the provider entity.

The existing regulatory framework in Portugal, made tangible in the VAT code, seems to be adequate and in line with international good practices in the case of the supply service, by defining a reduced VAT rate (6%), like the practice most in force in Western Europe.

The same is not true of sanitation services, where the regulatory framework is clearly unsatisfactory, given the current differentiation of the regime applied according to the nature (management model) of the water utility that provides the service.

The usual practice in Portugal can be considered universalized in its harmonized application in the case of the supply service, unlike what happens in the sanitation service.

It is proposed that, in the context of the revision of the VAT Code, the regime currently in force for the water supply service be extended to wastewater service (and urban waste management).

Tariffs for treated wastewater and desalinated water

Treated wastewater and desalinated water tariffs are a relevant factor because they impact the use of unconventional resources, such as the reuse and diversification of water sources in contexts of scarcity.

The existing regulatory policy in Portugal seems to be adequate regarding the tariff for treated wastewater and is still silent about desalinated water.

The usual practice of tariffs in Portugal can be considered still incipient.

In order to monitor the development of projects for the reuse of wastewater in Portugal, a systematic reporting of information about them on the regulatory authority's portal is proposed.

It is proposed that, as recommended by this entity, a single variable tariff be applied in each system depending on the volume delivered, which corresponds to the additional costs with production and availability compared to the costs with the collection and treatment of effluents that would be necessary to discharge them into the water environment.

It is proposed that the wastewater reuse service should be entitled to a contract, which should include the minimum monthly and annual volume that the user undertakes to buy and the period of the year in which he wants to be supplied.

As for the (on the bulk) tariff for desalinated water, it is proposed that it has only one variable component and is common for human consumption or of another type, ensuring equity, insofar as the water has the same quality characteristics and can play an equally important role in increasing the resilience of the service to different sectors (e.g. urban and agricultural).

Tariff or valorisation of municipal water uses

The tariff or valorisation of municipal water uses is a relevant factor because it impacts the degree to which municipal consumption (watering gardens, washing streets, fountains, etc.) is quantified and valued or supported by other users.

The existing regulatory policy in Portugal seems to be generally adequate, as it advocates that all central and local government entities be classified as non-domestic users.

However, the usual practice can be considered unsatisfactory, as these consumptions are not billed or adequately valued in most of the downstream water utilities.

It is proposed that the direct consumption of municipalities, often classified as "unbilled authorized consumption", should be billed in accordance with the recommendations of the regulatory authority and, in the case of municipal services (direct management), appropriately valued for the purposes of determining their degree of coverage of expenses (and the non-revenue water regulatory indicator).

It is also proposed that mechanisms that transfer the municipality's burdens with its water use to other service users be discontinued.

Figure 3 – Factors subject to recommendations for the formulation of tariffs for water services



Source: LIS-Water

Conclusions

The Portuguese regulatory policy on tariffs for water services is generally sound, in line with good international practices, but the tariff practice presents inequalities, excesses and inconsistencies, summarized below, which must be corrected for greater equity, transparency and economic efficiency:

- Compliance with the structural principles — cost recovery, consumer protection, equity, simplicity, efficiency, and internalization of externalities — requires greater harmonization of tariff mechanisms, based on robust costing.
- Mismatched cross-subsidisation persists, especially between domestic and non-household users, as well as unjustified differentiations between types of non-household users.
- The fixed component and the tier structure need to be harmonised, as they exhibit great dispersion and sometimes excessive progressivity.
- The integration of storm water tariffs remains ambiguous, requiring regulatory clarification and progressive adoption of models based on impermeable area.
- The protection of low-income families should move towards a universal and automatic regime.
- Demand management through seasonal tariffs should be applied mainly to non-domestic consumption and in specific situations, with greater water scarcity.
- Tariffs for auxiliary services, septic tanks, reused water and desalinated water need standardization, systematization and reliable costing.
- Taxation and VAT need equity corrections between services and between service management models, ensuring coherence and tax justice.
- Municipal uses continue to be undervalued or not billed, creating distortions that undermine transparency and coverage of expenses.

This resulted in the following proposals:

- General structure of tariffs: (a) maintain the indexation of the supply tariff to metered consumption and (b) also the differentiation between domestic and non-domestic users but reduce cross-subsidisation by

increasing the coefficient of goods of merit to 70%-80% (i.e. a 20%-30% discount between domestic and non-domestic users).

- Non-domestic users: (a) eliminate excessive subjective differentiations between types of non-domestic users and (b) consider their division into two segments: Administration/NGOs and Companies, with a tariff differential of 32.5% to ensure post-tax parity.
- Fixed component: (a) maintain two-part tariffs (fixed + variable), (b) create "guided" calculation rules for greater objectivity and transparency, and (c) conduct a costing study to determine fixed tariffs based on last-mile costs.
- Differentiation of the fixed component: (a) maintain differentiation only for non-domestic users, depending on the diameter of the meter, (b) create calculation criteria to avoid dispersion of values and excesses and (c) include in the costing study the analysis of the impact of the diameters of the meters and connection pipes.
- Variable component: (a) maintain increasing blocks for domestic users, a single block for Administration and NGOs and a single block for companies; (b) improve the level of compliance with the single block in non-domestic blocks and (c) simplify domestic to three blocks in the future ($\leq 15 \text{ m}^3$; $15\text{--}25 \text{ m}^3$; $>25 \text{ m}^3$).
- Variable wastewater tariff: (a) maintain indexation to water consumption and (b) determine the variable tariff as a percentage of the variable component of the supply, thus simplifying the procedures and the understanding of the bill.
- Urban waste: (a) promote PAYT tariffs and (b) maintain waste billing within the "water bill", if necessary.
- Rainwater: (a) provide for revenues shared between the municipality and users, (b) adopt a fee based on the impermeable area of the properties, (c) carry out a feasibility study for this indexation, (4) define the legal nature of the fee and (5) maintain the charge through the "water bill", if necessary.
- Social tariff: adopt a universal and automatic system, financially compensated with other customers.
- Seasonal tariffs: (a) preferably apply for demand management in non-domestic

- users; (b) with possible extension to domestic with increases of up to 30% and (c) use especially in regions with high water scarcity.
- Auxiliary services: (a) harmonize concepts, designations and values, (b) develop a costing study to define value markers and (c) make binding the regulatory entity's rule that recommends not billing extensions up to 20 m.
- Septic tanks: make the regulator's current recommendations on septic tank cleaning tariffs binding.
- Environmental taxation: (a) improve equity of the contribution between sectors (urban vs. agricultural/thermoelectric), (b) increase visibility on the return of the amounts paid by the urban sector and (c) evaluate the added value of the monthly inclusion of the water resources fee in the bill and propose complementary annual information.
- VAT: (a) harmonize the wastewater regime with that of supply (6%) and (b) extend the same regime to the management of urban waste.
- Non-conventional resources (reuse and desalination): (a) apply a single variable tariff per system for treated wastewater based on additional expenses, (b) holder supply by contract with minimum volumes, and (c) apply a tariff for desalinated water only with a variable component and a common tariff per installation for all uses.
- Municipal uses of water: (a) billing municipal consumption according to the recommendations of the regulatory authority, (b) valuing consumption for the purposes of covering expenses and non-invoiced water and (c) eliminating mechanisms that transfer municipal costs with the respective consumption to other users.

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