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THE NEW UNIFIED WATER LABEL FOR EUROPE

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MD- Unified Water Label



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Abstract: Water stress and the security of water supply are major concerns around the world. Climate change and the growing need for environmental protection, preservation of natural resources and efficient use, have made the availability of water and the existence of sustainable patterns in water consumption a concern of all. In Europe, the European Commission's targets for the efficiency of water-consuming products (WuP) include eco-design, eco-label and green public procurement (GPP) approaches, but these criteria are focused on the energy efficiency of faucets and showers and have had limited consumer acceptance. In the last 10 to 15 years many national initiatives have been developed to address the efficiency of water-using products, of which the Swiss and Swedish energy labels, together with the European water label and the ANQIP Portuguese label have decided to come together to form a unified label for products that use water. Considering that the EU consumer currently lacks consistent information on the performance and water consumption of these essential products, existing European and National Trade Bodies and National Schemes, representing many hundreds of manufacturers, have developed a simple and harmonised water efficiency labelling scheme – the Unified Water Label. This scheme applies to products that use water and also considers the associated energy for water heating. According to the European Commission, encouraging the replacement of all common devices (faucets, toilets, showers, bathtubs, washing machines, dishwashers, products for external use, etc.) contributes to a reduction in consumption of up to 35% in faucets, 11% in showers and associated energy up to 30%, by 2030.

INTRODUCTION

Water stress and the security of water

supply are major concerns around the world. Climate change and the growing need for environmental protection, preservation of natural resources and efficient use of water, have made the availability of water and the existence of sustainable patterns in water consumption a concern of all.

In Europe, water stress is beginning to significantly affect several countries, especially in the Mediterranean basin. Last summer (2022) many European countries declared a drought alert and introduced emergency measures to restrict water usage. Italy declared a state of emergency in five northern regions, as it battled with its worst drought in 70 years. Almost all of France was on drought alert, and 96% of Portugal suffered either 'extreme' or 'severe' drought, with Spain also introducing water saving measures.

These headlines were shocking and serve as a stark reminder to the bathroom industry that the need to take the water efficiency message to a consumer that is reluctant to change, is now, before it is too late.

The European Commission has encouraged eco-design, eco-labeling and "green" public procurement (GPP) approaches, but have been focused on the energy efficiency of faucets and showers and have had limited consumer acceptance.

As a result of the lack of a strong policy by the European Commission to objectively promote water efficiency in buildings, several efficiency labels for products that use water (WuP) have emerged in Europe in recent years, usually for voluntary use, at the initiative of industry or civil society associations. The importance of these labels has been emphasized not only in relation to water efficiency, but also in relation to energy efficiency.

In fact, a study carried out in a municipality to research this showed that reducing water consumption by just 1^{m3} through water efficiency measures in buildings can result

in a reduction of about 7.2 kWh in energy consumption. The study took into account the energy consumed for the production of domestic hot water and the reduction of the energy consumed by water supply and drainage networks and treatment plants (by reducing the flows captured, treated and pumped).

According to the European Commission, the replacement of all commonly used devices (faucets, cisterns, showers, bathtubs, outdoor products, etc.) with efficient products would, by 2030, lead to a reduction in consumption of up to 35% for faucets, 11% for showers and 30% for associated energy. These predicted savings are in fact already being achieved, with 50% of all taps listed with the Unified Water Label delivering less than 6 litres per minute.

In the European Union (EU), the total water abstraction for use in faucets and showers was estimated at about 25,000^{Mm³} in 2010 and the total primary energy requirement in the EU associated with the use of faucets and showers was estimated to be about 3000 PJ³/year [5]. Total_{CO₂} eq emissions related to the EU's annual primary energy demand from faucets and showers were estimated at around 160 Mton in 2010.

The European Commission acknowledges what Industry is achieving with the Unified Water Label.

METHODOLOGY

Several initiatives have been developed in Europe over the past 10 to 15 years to promote the water efficiency of products that use water.

However, parallel schemes in the market can cause confusion for consumers and can make products that wish to enter the market in different countries more expensive. Thus, the main European label management bodies have decided to create a new platform, the UK and Brussels based Unified Water

Label Association (UWLA), with the aim of developing a Unified European label (UWL). In March 2018, an agreement was reached with representatives of Water Label, ANQIP, Swedish Energy Efficiency Labelling and Swiss Energy Label to develop a unified label for all products that use water in buildings. Figure 1 shows the Unified Water Label. A single label covering water and energy aspects was considered to be the best option for the market.

The Unified Water Label is well supported by industry across Europe and is now supported by 160 brands and currently has 16, 431 products on the database.

The Unified Water Label has also gained significant credibility as it has been identified as the bench criteria for government legislation such as the Taxonomy Directive and within the ISO Standard 31600:2022 as best practice.

RESULTS

The Unified Water Label features performance bars of different colors (green, sage, yellow, orange and red), corresponding to the possible range of flows or volumes for the product, as represented in Figure 1. For each specific classification, a table with the specific value of the flow or volume can be added to the right side of the graph. In electric showers, urinal controllers, gray water systems, and in discharge replacement devices, for example, an “efficient” product label can also be used (Figure 2).

The Scheme applies to showers, faucets, flush toilets, urinals, bathtubs and other products. For showerheads, the green corresponds to “≤ 6 L/min” and the red to “> 13 L/min”. For cisterns, the corresponding values are “≤ 3.5 L/min” and “> 6.0 L/min”. In the case of taps, the green and red performance grades corresponds to “≤ 1.0 L/min” and “> 4.0 L/min” respectively.

Additional sustainable features can be added

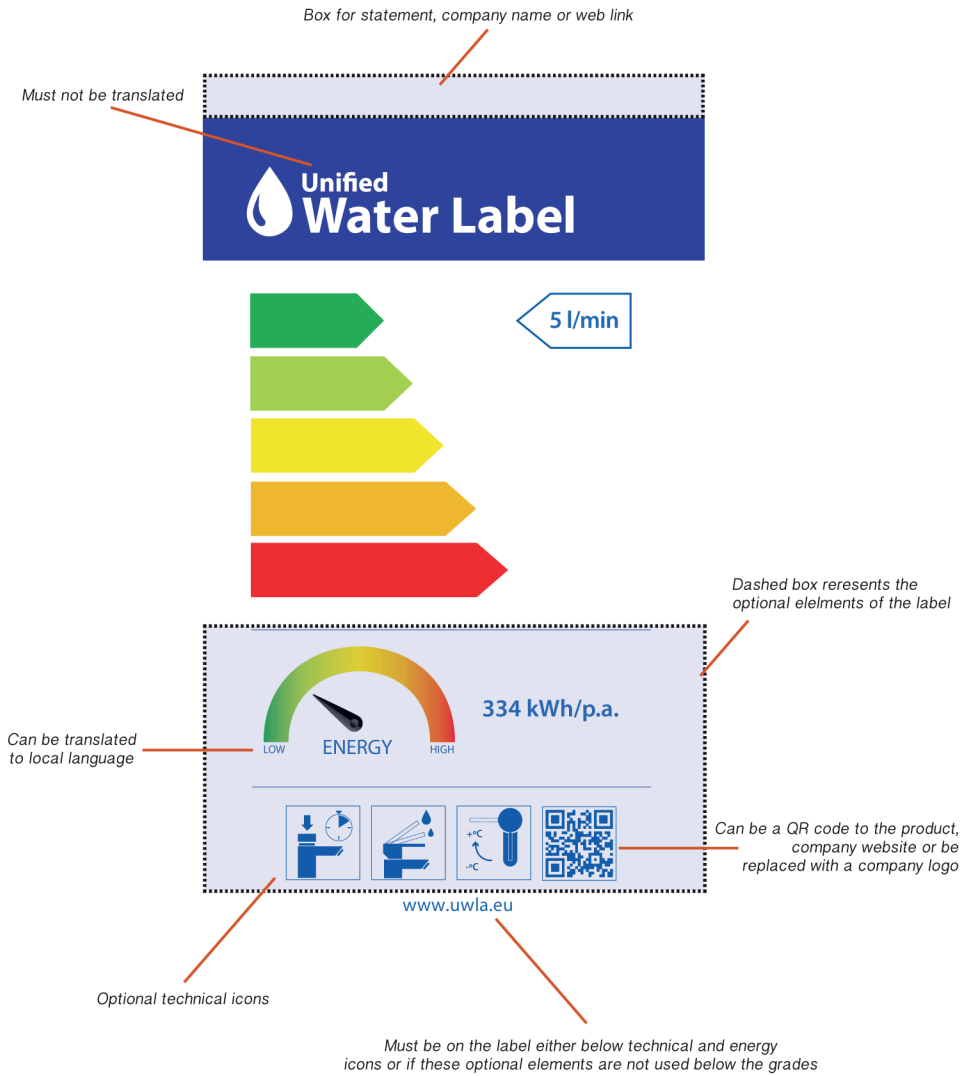


Fig. 1. Unified Water Label



Fig. 2. Efficient product label

that highlight the technical characteristics present in the product, manufacturers can add on the label up to a maximum of three technical icons (in addition to the energy icon). The purpose of the technical icon is to further promote additional features that when used correctly can enhance efficiency benefits. Figure 3 shows some examples of technical icons for faucets and showers- the complete set of icons can be found on the website [here](#).

The label also has an energy icon at the base of the Unified Label to show the consumer the expected annual energy cost of using the product, as shown in Figure 4.

It is a prerequisite of the Labelling Scheme that all products meet the requirements of the intended country of destination. Products must comply with all relevant European Standards, including, of course, compliance with the scheme criteria and tests, provided for in these standards. The product must comply with the Declaration of Conformity provided by the Manufacturer that accompanied the original orders and labeling. It is possible that the European Committee for Standardisation (CEN) will develop specific EN standards for the determination of flows or volumes in plumbing appliances or products with a view to classifying efficient products. If this happens, UWL will naturally incorporate these procedures.

The Scheme is supported by an audit process. Audits are carried out regularly by accredited entities on randomly selected products, corresponding to 5% of the labelled products placed on the market.

CONCLUSIONS

Many initiatives have been developed in the last 10 years to promote the efficiency of products that use water in buildings, at the national and international levels. In the European Union (EU), concerns about the water efficiency of water-using products have

recently been highlighted in the context of water scarcity and droughts and eco-design approaches. The European Commission recognises incentivisation will drive greater sustainability and are currently consulting, with Sustainability Finance, an incentive programme which is expected in 2024.

In Europe, WuP performance in terms of water consumption and comfort for consumers has been constantly improved by the industry, respecting the essential requirements of health, comfort and safety, national and European. In this way, it seeks to respond to increasingly important demands for environmental preservation and the needs of adaptation in the face of increasing water stress in many countries, respecting the minimum comfort for users.

Considering that, in general, consumers lack consistent information on the performance and water consumption of common devices, UWL, being a clear scheme, aims to contribute to a more efficient use of resources and energy in buildings, not only in Europe, but in all countries that use these labelled products.

Global companies are joining the scheme as they recognise the benefits and want to play their part in addressing water and energy efficiency. The Unified Water Label scheme is open to any company that manufactures, supplies or sells products into Europe.

Industry has shown that it has the solution, as we see market transformation happening. The market has been influenced by the Unified Water Label resulting in a greater portfolio of sustainable products in the market.

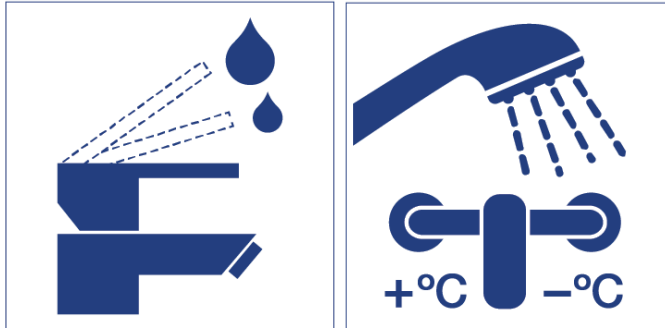


Fig. 3. Examples of faucet and shower icons



Fig.4. Energy icon