

Guide

## “Ten steps towards the sustainable pool”



Leaks



Evaporation



Lighting



Filtration



Disinfection &  
Maintenance



Winterising

### What is a “sustainable” swimming pool?

A sustainable swimming pool is defined as one that has key features to cause less environmental impact by using significantly fewer resources (water and energy), and that is feasible in terms of maintenance and the return on the initial investment.

**Is this a myth? Is it just a marketing gimmick?** This is not a myth and it is no gimmick: a sustainable swimming pool is possible. We have drawn up this ten-step guide that describes the measures that have been put in place in other countries and puts forward other innovative solutions. The modular steps form part of a whole and between them savings of up to 70% can be made in water and energy resources.

At Fluidra, we are committed to raising the awareness of the general population and to strengthening our ties with the appropriate authorities and public bodies so that together we can all strive to build a future in which there is respect for the environment and for a valuable resource such as water.



Leaks

- 1. Avoiding or detecting and repairing leaks caused by building defects or lack of maintenance.** Each small leak that loses 1 drop of water per second results in the loss of 8,000 litres/year.





**Evaporation**

2. **Installing a cover** reduces water loss due to evaporation by 30% in public pools and by up to 65% in private pools. As a result, an energy saving of around 25% is made in evaporation, convection and heating. In addition, a safety feature like a cover is compulsory by law in some countries (e.g. France).



**Lighting**

3. **Using LED lighting** allows energy savings of up to 80% to be made thanks to the increased energy efficiency of this technology, which has additional advantages such as a longer lifetime and greater performance (colours, sequences, etc.).



**Winterising**

4. **Treating pool water throughout the year (even in winter).** Once a pool is filled, the water is maintained fit for use all year round and should not be emptied. This saves a considerable amount of water and avoids the appearance of structural problems and leaks. Savings are also made in water and chemical products when preparations to put the pool in working order are made in the springtime.



**Disinfection & Maintenance**

5. **Using an automatic, autonomous pool floor cleaner** makes it easier to clean the inside of a pool and reduces the amount of maintenance work required. It also uses 20% less water in the filter cleaning process.





Filtration

**6. Optimising the filtration and filter cleaning times.** By using recycled glass as filter medium, savings of up to 25% are made on the water required to backwash filters. In public pools, the combination of air and water in the cleaning process saves between 30 and 60% in water. In private pools, the Vrac automatic valve system helps to optimise the frequency and duration of the filter cleaning process.



Evaporation

**7. Recovering heat and condensates in public pools gives added value for a minimum investment.** Water-water heat exchangers can save up to 80% in replacing heated water. Air-air heat exchangers offer a similar performance. Condensate recovery units recover 100% of water vapour that can be reused for saunas, laundry rooms etc.



Disinfection & Maintenance

**8. Automating disinfection optimises the performance of the disinfectant used** as automatic regulation devices (e.g. Pool Watch) avoid putting in too much or too little of the chemical products in the water as it adds the exact amount of disinfectant required. It also optimizes the consumption of the pH regulator, thus improving the quality of water and air.

The **salt electrolysis** system for disinfecting pools should be highlighted. It is based on two natural

elements: salt and water. The AstralPool Chlor Smart system works by diluting a small quantity of salt in the water when the saline chlorinator is installed. When the salty water passes through the electrodes, the salt turns into an active disinfectant (sodium hypochlorite) that destroys algae, bacteria and fungi. Savings are therefore made in the consumption of chlorine, its application is far more convenient and the on-site production of disinfectant has the added advantage that it does not have to be bought, transported or handled.



The **Ultraviolet (UV)** disinfection systems disinfect the water and make it possible to reduce chlorine doses by up to 30%. They also reduce the presence of by-products derived from disinfection, which enables users to enjoy better quality water and save up to 50% in the topping up of water.



- 9. Minimising the energy costs generated by the recirculation pump.** Fitting a Victoria Dual Speed pump allows its working speed to be adapted to the real requirements of a pool, which means an energy saving of 65%. In addition, it is quieter and has greater durability. In states such as California, this kind of pump is compulsory.



- 10. Reducing the filter workload** in the removal of solids in pool water by installing a Hydrospin prefiltration device, very common in countries such



Filtration



Filtration

as Australia. Thanks to this prefilter, most impurities do not reach the filter because they are retained beforehand. It takes longer for the filter to become dirty and does not therefore need to be backwashed so often, which enables water savings of 50%.

**For further information (journalists):**

Press Agency Inforpress

Tel.: + 34 93 419 06 30

[gbrunet@inforpress.es](mailto:gbrunet@inforpress.es)

Contact person: Goretti Brunet

**For further information:**



Tel: +34 93 713 63 44

Email: [eboluda@fluidra.com](mailto:eboluda@fluidra.com)

Contact person: Eva Boluda