

# Abstract

## Good Practice Guide for Energy Efficiency in the Water Sector

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Expenses related to operating costs have always posed problems for many companies and providers of water services especially in developing countries where the provision of water gets more difficult and where the cost is growing permanently unlike its selling price is always administered and subsidised by the governments.

In this respect, the kWh used to produce 1 m<sup>3</sup> has always been a priority and research focus for the operator manager to reduce the price at fair value.

In Algeria, the water sector is ranked second after industry sector and 42% of the turnover of the national company of the water distributor ADE «Algerian waters" is used to pay electric bills hence its debt amounts to 22 billion Algerian dinars end of 2013 financial year.

This perfectly illustrates the difficulties faced by companies in the sector in terms of use of electrical energy to operate the equipment .And because the bills are salted and incomes of these organizations are not sufficient to cover all the charges.

Saving energy in hydraulic systems is now an economic necessity that is combined with an environmental necessity.

Most actions to reduce energy consumption are easy to implement and very quickly cost effective.

Substantial gains could be reaped in terms of expenditure by the rigorous implementation of a set of actions and good practices to adopt which we treat major in this manuscript as a practical guide that aims to support responsible Local energy cell within ADE units "Algerian waters" in the development of an energy policy based on economies and financial gain that may be substantial.

This guide is not an end but the starting point, the foundation stone of a comprehensive approach based on the mobilization of all including the continuous support officials up in the hierarchy within units of the company.

To accompany the reflection of the department responsible for energy that is already there at the unit level, this guide takes the form of recommendations around the following key themes:

- Good knowledge of the balance of energy consumption of the installations
- Appropriate choice of the energy billing price and of "power demand"
- Monitoring and continuous monitoring of energy invoices
- Need to establish and implement preventive and corrective maintenance schedules
- Use other alternative such as renewable energy
- Adopt simple gestures and behaviors
- Conclusion