

DEVICE FOR THE REDUCTION OF ENERGY CONSUMPTION AND WATER WASTAGES IN THE HOUSES

Innovations and Benefits - This device allow to reduce warm water wastage, and the energy for its production, in household without the necessity to renovate the hydraulic pipeline of the house.

Use - It is an electromechanical device applicable in any home or sanitary water circuit. The appliance prevents the hot water wastage until the water has reached the pre-set required temperature. In this way the waste of water and energy related to the waiting time of the water heating is avoided. The advantage is multiple: reduction of waste of water for its heating, possibility of installing water flow reducers, without lengthening waiting times for hot water, possibility to feed appliances (dishwasher in particular) directly with hot water without having to use to electric heating, which is particularly useful in combination with solar panels.

Applications and ongoing Activities - A one-year experimentation in a real environment was conducted, which allowed to highlight the feasibility of the application by reducing the waste of hot water at the points of use. Currently we are working to allow this technology to get hot water directly to the appliances that need to heat it for their operation (washing machines, dishwashers).

