## Water

Total water consumption fell by about $8 \%$ in 2016 compared with 2015. This outcome is, however, partly influenced by locations that - due to closure or time-related factors - did not communicated their environmental data. These factories were, by contrast, included in the scope of reporting in 2015.

## WATER CONSUMPTION ( $\mathrm{m}^{3}$ )



The combined energy factories together achieved a net reduction in consumption, even on a unit of production basis. This reduction is therefore real and not due solely to the exit of operating units from the scope of reporting. Despite a slight decrease in the quantity of water consumed per unit of production, the consumption of the optical fibre factories increased overall, although the increases in the Telecom and Accessories sectors were more evident.

In many cases, the differences at local level were due to losses from water pipes (which resulted in increased consumption if they occurred during 2016, but decreased consumption if they occurred previously and were repaired in 2016). In a few cases, the changes were due to meter malfunctions (occurring in 2016, or occurring previously and resolved in 2016).

WATER CONSUMPTION, ANALYSED BY SOURCE OF SUPPLY (m ${ }^{3}$ )


## WATER CONSUMPTION PER TONNE OF PRODUCT (m3/t)



WATER CONSUMPTION PER Km OF PRODUCT (m3/Km)


## PERCENTAGE OF PROCESS WATER RECIRCULATED

Process water - e.g. that used to cool semi-finished products - is recirculated at numerous factories, in whole or in part depending on the situation, in order to avoid excessive consumption. In order to better understand the degree of efficiency achieved in the use of water, the application of the methodology, devised in collaboration with the Merlino factory, to determine the "percentage of water recirculated" with respect to total water consumption has been extended. The concept is based on how much is saved (compared with not having a recirculation plant) in relation to the total quantity of water consumed for processing reasons (due to evaporation, occasional emptying of the circuit, or the lack or only partial installation of a recirculation plant).

The formula is being applied to an increasing number of factories and, in 2016, about 60\% of operating units supplied results in terms of water recirculated as a percentage of the total quantity used. In the overwhelming majority of cases, hydraulic circuits are served by a recirculation system and, in over $60 \%$ of these, recirculated water accounts for $99 \%$ or more of the total water used, while about $20 \%$ of factories recirculate between $95 \%$ and $99 \%$ of their water, just $10 \%$ between $90 \%$ and $95 \%$ and $10 \%$ less than $90 \%$ (since their recirculation systems do not cover all their hydraulic circuits, yet).

The above results were provided by the following countries: Argentina, Brazil, China, Estonia, France, Germany, Indonesia, Italy, Norway, Russia, Sweden, Turkey, UK, Hungary, Romania, Slovak Republic, Czech Republic, certain US operating units, Netherlands.
The percentages stated above may of course change as application of the formula is extended to other factories, in order to obtain full coverage of the Group.

