The Group measures its energy efficiency by using an eco-efficiency indicator that establishes a relationship between the service offered to the customer (bits transmitted) and the company’s impact on the environment (joules of energy consumed). The factors taken into consideration are the amounts of data and voice traffic of the fixed and mobile networks, and energy consumption for industrial purposes (transmission and climate control in exchanges), civil purposes (electricity for office use, office air conditioning and office heating) and vehicles. The graphs below show the level of the eco-efficiency indicator over the past three years for the Domestic and Brazil BUs.

In 2018 the value of the indicator calculated for the Domestic BU was equal to 11,121 bit / joule, an increase of 25.3% compared to 2017 and of 70.3% compared to 2016. The commitment continues with the definition for 2019 of a target of 13,300 bit/Joule (see the 2019 objectives in the Appendix), equal to an increase of + 19.6% compared to the 2018 figure. This is the result of a substantial increase in data traffic, which, thanks to the efficiency of the network, has not led to a corresponding increase in electricity consumption. Also the eco-efficiency index calculated for Brazil shows a continuous improvement: in 2018 it grew by 241% compared to 2017 and by over 271% compared to 2016. The significant increase in the indicator for Brazil is because in 2018 the LTE traffic (equal to 67% of total traffic) was included in the calculation.

The values of the indicators calculated respectively for Italy and Brazil are not directly comparable because the two organisations are very different in operational and environmental terms: e.g. in Brazil the traffic is primarily mobile and, as previously mentioned, no heating fuels are used in view of the climate conditions.

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1 The comparison was made with a 2017 data updated with respect to that reported in the last Sustainability Report, as the result of a review subsequent to the publication of the 2017 Report. The data of the 2017 eco-efficiency index of the upgraded Domestic BU is equal to 8,877 bit/joule.