ENVIRONMENTAL PROTECTION (ENERGY END-USE EFFICIENCY) ACT 2009

GUIDANCE NOTE

Implementing Article 9(3) of the Energy Efficiency Directive

May 2018

Guidance on Technical Feasibility & Cost Efficiency in relation to Article 9(3) of the Energy Efficiency Directive 2012/27/EU issued in accordance with Section 11(8) of the Environmental Protection (Energy End-Use Efficiency) Act 2009

Article 9(3) of the Energy Efficiency Directive (the "Directive") (as transposed into Gibraltar law via Section 11(3), 11(4) and 11(5) of the Environmental Protection (Energy End-Use Efficiency) Act 2009 (the "Act")) states that:

"Where heating and cooling or hot water are supplied to a building from a district heating network or from a central source servicing multiple buildings, a heat or hot water meter shall be installed at the heating exchanger or point of delivery. In multi-apartment and multi-purpose buildings with a central heating/cooling source or supplied from a district heating network or from a central source serving multiple buildings, individual consumption meters shall also be installed by 31 December 2016 to measure the consumption of heat or cooling or hot water for each unit where **technically feasible and cost-efficient**. Where the use of individual meters is not technically feasible or not cost-efficient, to measure heating, individual heat cost allocators shall be used for measuring heat consumption at each radiator, unless it is shown by the Member State in question that the installation of such heat cost allocators would not be cost-efficient. In those cases, alternative cost-efficient methods of heat consumption may be considered".

In order to determine whether the installation of such meters is technically feasible, it is important to bear in mind the equivalent concept of "technical possibility" given in Recital 29 of the Directive. As such, it can be assumed that individual metering of heating/cooling consumption in multi-apartment buildings is technically possible when the installation of said meters would not require changing any existing in-house piping or ducting. By contrast, where hot water, heating or cooling enters and leaves the individual apartments at several points, the use of individual meters can be considered to not be technically feasible or cost efficient.

In interpreting the concept of "cost-efficiency", a comparison can be carried out between the costs of the installation and maintenance of the meters/heat cost allocators and the benefits for the end consumer and other parties (owner/user of the building and individual apartments, energy supplier

etc). This calculation should be based on the methodology provided in the European standard EN 15459 (Energy performance of buildings – economic evaluation – procedure for energy systems in buildings).

In assessing the benefits of installing individual meters or heat cost allocators, account should be taken of different benefits including energy savings among final customers that could be achieved through behavioural changes triggered by the metering data and the billing information based on the measured consumption. Various studies indicate that the range of savings due to behavioural change after the introduction of individual metering and billing based on actual consumption often reach 30% in comparison to systems without individual metering and with billing based on flat rates (e.g. per m²).

It should be noted that **all new** multi-purpose or multi-apartment buildings supplied from district heating/cooling and **all those undergoing major renovations** as defined in the Energy Performance of Buildings Directive 2010/31/EU, <u>must</u> have individual meters installed for the measurement of heating, cooling or domestic hot water consumption.