



# Energy Efficiency Directive:

**Provisions on metering and billing of individual consumption of heat/cool**

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# ENERGY EFFICIENCY DIRECTIVE 2012/27/EU ADOPTED AND IN FORCE

- Publication in OJ: 14 November 2012
  - Entry into force: 4 December 2012
  - 30 April 2014 – new NEEAPs
  - Main Transposition:  
**5 June 2014**
  - Frequent billing information based on actual consumption – **31/12/2014**
  - Individual heat/cool/hot water consumption meters in multi-apartment buildings – **31/12/2016**
- \*exception for DHC-connected new buildings/undergoing major renovation – requirement since 17/5/2008)



[http://ec.europa.eu/energy/efficiency/eed/eed\\_en.htm](http://ec.europa.eu/energy/efficiency/eed/eed_en.htm)

# ENERGY EFFICIENCY DIRECTIVE 2012/27/EU ADOPTED AND IN FORCE

- 6 November 2013:  
Guidance note on EED  
Articles 9, 10 and 11  
SWD(2013) 448 final



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## COMMISSION STAFF WORKING DOCUMENT

Guidance note on Directive 2012/27/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/EC, and repealing Directives 2004/8/EC and 2006/32/EC

Articles 9 - 11: Metering; billing information; cost of access to metering and billing information

*Accompanying the document*

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN  
PARLIAMENT AND THE COUNCIL

Implementing the Energy Efficiency Directive – Commission Guidance



## Structure of the provisions

1. Requirements on metering (Art.9)
  - a. General obligation individual accurate competitively priced meters (\*)
  - b. Specific requirements for smart electricity/gas meters
  - c. Specific requirements for metering of heating/cooling/ domestic hot water in multi-unit buildings (\*)
2. Requirements on billing and billing information (Art.10)
  - a. Specific requirements for all cases except for smart electricity/gas meters (\*)
  - b. Specific requirements where smart electricity/gas meters are available
  - c. Specific requirements for all cases (\*)
1. Requirements on costs of metering and billing information (Art.11) (\*)

# Article 9 (metering)



- Article 9(1) Member States to ensure – subject to technical feasibility and cost-effectiveness - that final customers of electricity, natural gas, **district heating, district cooling and domestic hot water** are provided with competitively priced individual meters that accurately reflect the final customer's actual energy consumption and that provide information on actual time of use (introduced by Article 13 of Directive 2006/32/EC).
- In the EED, this right is now also extended to final customers residing in multi-apartment and multi-purpose buildings with a common central heating/cooling/hot water system for such a building, which should be provided with such meters by 31 December 2016.

# Article 9 (metering)



- In the case of multi-apartment or multi-purpose buildings supplied with heating or cooling or hot water from external sources, Member States must ensure that a meter is installed at the heat exchanger or the point of delivery to the building. Such meters must be installed by 5 June 2014. No exceptions are foreseen (*Article 9(3) first paragraph*).
- Article 9(3) second para, requires Member States to ensure that individual meters for each apartment or unit in such building are installed by 31 December 2016 where technically feasible and cost-efficient (legal framework must be earlier !)
  - » If the installation of individual heat meters is not technically feasible or not cost-efficient, accurate heat cost allocators must be installed for each radiator, unless it is shown by the Member State that this would not be cost-efficient (need for transposition of this order of importance)

# Article 9 (metering)



- Article 9(1)(b) imposes an unconditional requirement to provide individual meters (not heat cost allocators) in cases where a new connection is made in a new building or where a building undergoes a major renovation as defined in Directive 2010/31/EU.
  - » This means that the provisions of Article 9(3) on what is '*technically possible*' and '*cost-effective*' will not apply to such situations.
  - » This obligation is limited to cases where the final customers are supplied/plan to be supplied from district heating or cooling.

# Article 9 (metering)



- Member States are required to inform the Commission of the technical conditions and economic thresholds or other criteria under which they justify that it would not be *technically feasible* or *cost-effective* to comply with their obligations.
  - » In the case of multi-apartment and multi-purpose buildings addressed in Article 9(3), where it is found *technically feasible and cost-effective* to install individual heat meters but the final customers already have heat cost allocators, then by 31 December 2016 Member States must ensure that individual heat meters are installed.
  - » However, it can be assumed that the existence of heat cost allocators is a factor that would normally affect the cost-benefit calculation for the use of individual heat meters.





## Technically feasible

- *(Recital 29)*: it can be assumed that individual metering of heat consumption in multi-apartment buildings is technically possible when the installation of individual meters would not require changing the existing in-house piping for hot water heating in the building.
- By contrast, where the hot water used for heating enters and leaves individual apartments at several points, the use of individual heat meters is less likely to be technical feasible or cost-efficient.
- In such buildings, measurements of individual heat consumption can be carried out by means of individual heat cost allocators.



## *Cost-efficiency of individual metering*

- In interpreting the concept of 'cost-efficiency', Member States can compare the costs of the installation and maintenance of the meters/heat cost allocators with the benefits for end consumer and other parties (owner/user of the building and individual apartments, energy supplier, etc.).
  - » Various studies indicate that the range of savings due to behavioural change after the introduction of individual metering and billing based on actual consumption of heat often reach 30% in comparison to systems without individual metering and with billing based on flat rates (e.g. per m<sup>2</sup>).

# Article 9 (metering)



- EED does not provide a definition of a multi-apartment or multi-purpose building.
- A *multi-apartment building* could be understood as a building with at least two apartments.
- A *multi-purpose building* could be understood as a building occupied by at least two entities that need to share between themselves the bill for the energy purchased.

# Article 9(3) third para (transparent rules for cost allocation)



- Where multi-apartment buildings are supplied from district heating or cooling, or where own common heating or cooling systems for such buildings are prevalent, Member States may introduce transparent rules on the allocation of the cost of thermal or hot water consumption in such buildings to ensure transparency and accuracy of accounting for individual consumption.
- Where appropriate, such rules shall include guidelines on the way to allocate costs for heat and/or hot water that is used as follows:
  - » (a) hot water for domestic needs;
  - » (b) heat radiated from the building installation and for the purpose of heating the common areas (where staircases and corridors are equipped with radiators);
  - » (c) for the purpose of heating apartments.

# Article 10 (bills and billing info)



## *Distinction between bills and billing information*

- Article 10(3)(d) introduces a distinction between :
  - » **bills** (which carry the obligation to settle the due amount) and
  - » **billing information** (which do not, but will normally otherwise contain the same information).



- According to EED Annex VII, bills on the basis of actual consumption must be provided at least once a year (no conditionality foreseen in EED, by 5/6/2014)

# Article 10 (billing info)



## Art 10(1) and Annex VII point 1.1

- Where smart meters are NOT available, *where technically possible and economically justified*: by 31 December 2014, billing information based on actual consumption to be made available at least quarterly, on request or where the consumers have opted to receive electronic billing or else twice yearly (gas used for cooking may be excluded)
- Where meters are not available obligation on billing information can be fulfilled by a system of self-reading
  - » In such cases, billing and billing information can be based on estimated consumption or a flat rate only if the final customer did not provide the reading

# Article 10 (billing info)



## Art 10(1) and Annex VII point 1.1

- The minimum frequencies in point 1.1 of Annex VII must be respected unless not technically feasible or economically justified – which the Member States would have to explain when they notify their transposition of Article 10 by 31 December 2014.
- The critical pre-assumption for the obligation for the provision of accurate billing information based on actual consumption is the availability of individual metering equipment (meters or heat cost allocators).





(...) in clear and understandable terms in or with their bills, contracts, transactions and receipts :

- ✓ (a) current actual prices and actual consumption of energy;
- ✓ (b) comparisons of the final customer's current energy consumption with consumption for the same period in the previous year, preferably in graphic form;
- ✓ (c) contact information for final customers' organisations, energy agencies or similar bodies, including website addresses, from which information may be obtained on available energy efficiency improvement measures, comparative end-user profiles and objective technical specifications for energy-using equipment.



- In addition, wherever possible and useful, Member States are obliged to ensure that comparisons with an average normalised or benchmarked final customer in the same user category are made available to final customers in clear and understandable terms, in, with or signposted to within, their bills, contracts, transactions, and receipts at distribution stations.

# Article 10 (billing info)



## Art 10(2)

- Where smart electricity or gas metering is in operation, Member States must ensure that final customers are provided with complementary information on their own consumption.
- ✓ This is not required for heat/cooling/hot water meters. However, where consumption data is collected frequently (either by means of remote reading or self-reading), such historical consumption data can also be made available to consumers e.g. via personalised website access.

# Article 10 (billing info)



## Art 10(3)

- With or without smart meter: Member States must require that from 5 June 2014, information on historical consumption is provided to the final customers or an energy service provider (ESCO) designated by the final customer, to the extent such information is available (if requested by the final customer).

# Article 10 (billing info)



## Art 10(3)b

- By 5 June 2014 all final customers must be offered the option of electronic billing information/electronic bills for all types of consumption covered by Articles 9, 10 and 11, whether with or without smart meters



- Metering and billing information as well as bills to be provided free of charge to the final customer
- ✓ Exception: sub-billing for heating/cooling/domestic hot water provided in multi-unit buildings based on sharing the costs between the final customers in multi-apartment buildings
- ✓ Transposition deadline: 5 June 2014



- In case of centralised heating and cooling and domestic hot water use in multi-apartment and multi-purpose buildings, accurate allocation of consumption and calculation of costs must be carried for the end users occupying such buildings on a non-profit basis.
- ✓ The non-profit basis should be understood as disallowing making profits on the top of the pure costs related to the service to issue such accurate individual billing/ billing info.



- The costs incurred by assigning this task to a third party can be passed onto the final customers occupying such buildings to the extent that such costs are reasonable.
- ✓ Billing information issued for example by a district heating company to an owner of a multi-apartment building or an association of flat owners would need to be provided free of charge.
- ✓ However, the costs related to contracting a service related to accurate measuring, allocating and accounting for individual consumption for different apartments or units in such buildings (sub-billing), may be passed on to the end-users occupying these apartments/units.



# Article 11 – cost of billing



- Article 11(1) requires Member States to ensure that final customers receive all their consumption data as well as bills and billing information free of charge.
  - » It follows that energy suppliers or other organisations must themselves bear the costs of producing and delivering bills and billing information to the final customers.
  - » This does not rule out energy companies giving final customers a discount or bonus for opting for electronic bills and billing information.



# Thank you!

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*This presentation by DG ENER C3 is a technical aid to illustrate Articles 9, 10 and 11 of the EED. It does not represent the views of the European Commission. Please note that only the European Court of Justice can provide binding interpretation of EU law.*