Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (Text with EEA relevance)

ANNEX II

METHODOLOGY FOR DETERMINING THE
EFFICIENCY OF THE COGENERATION PROCESS

(b)Calculation of primary energy savings

The amount of primary energy savings provided by cogeneration production defined in accordance with Annex I shall be calculated on the basis of the following formula:

$$\text{PES} = \left(1 - \frac{1}{\frac{\text{CHPH}\eta}{\text{RefH}\eta} + \frac{\text{CHPE}\eta}{\text{RefE}\eta}}\right) \times 100\,\%$$

Where:

> PES is primary energy savings.
>
> CHP Hη is the heat efficiency of the cogeneration production defined as annual useful heat output divided by the fuel input used to produce the sum of useful heat output and electricity from cogeneration.
>
> Ref Hη is the efficiency reference value for separate heat production.
>
> CHP Eη is the electrical efficiency of the cogeneration production defined as annual electricity from cogeneration divided by the fuel input used to produce the sum of useful heat output and electricity from cogeneration. Where a cogeneration unit generates mechanical energy, the annual electricity from cogeneration may be increased by an additional element representing the amount of electricity which is equivalent to that of mechanical energy. This additional element does not create a right to issue guarantees of origin in accordance with Article 14(10).
>
> Ref Eη is the efficiency reference value for separate electricity production.