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The European cogeneration sector is committed to the creation of a resilient, decentralised and carbon neutral European energy system by 2050 with cogeneration as its backbone, empowering European citizens and industry to generate their own efficient, reliable and affordable clean heat and power locally.

COGEN Europe supports the review of the Energy Taxation Directive (ETD) in the context of the ongoing Green Deal debate and its alignment in a coherent way with EU's energy, climate and competitiveness priorities.

In this regard (*and as already reflected in recital 8 of the ETD*), energy taxation has a crucial **dual role** to play. Namely, the ETD should: (i) enable the energy transition by incentivising the consumption of low-carbon energy in the most efficient way possible, (ii) while also preserving the global competitiveness of European industry, in order to prevent carbon leakage.

It is particularly important for the ETD to:

- apply “energy efficiency first” by setting **differentiated tax rates based on the efficient use of energy products, as part of the energy content component of taxation**
- where deemed necessary, **adequately and coherently account for carbon intensities across the entire energy value chain** of various energy products, by taking a system-level perspective and excluding sectors already subject to carbon taxation in other national or EU legislation
- provide for a **full mandatory exemption of excise tax on 100% of the energy products used for high efficiency cogeneration, as well as on the electricity it produces**, thus implementing “energy efficiency first” principle, as a core pillar of the EU Green Deal
- use the “**high efficiency cogeneration**” methodology instead of the outdated “environmentally friendly” cogeneration standard
- calibrate **energy taxation to foster energy systems integration and incentivise the maximum and cost-effective uptake of renewable energies and energy efficiency across electricity, gas and heat infrastructure.**
- energy taxation should account for the **role of gas carrier, delivered via the gas network system or as off-grid solutions, in integrating renewable energy sources** and foster their uptake
- **investigate the role of energy taxation in addressing air pollution**, while taking into account the impact of existing legislation, including the Industrial Emissions Directive and the Ecodesign Regulation on Space Heaters

#### **1. Implement energy efficiency first by linking taxation rates to the efficient use of energy products**

The Clean Energy Package, adopted throughout 2018-2019, has defined “energy efficiency first” as the cornerstone of energy policy. According to the Energy Efficiency Directive and the Energy & Climate Governance Regulation, energy efficiency must be applied across the energy value chain – in energy conversion, transmission, distribution and use. Energy efficiency should be set as a stand-alone objective, while acknowledging its role in carbon reductions. Using energy sources in an energy efficient way reduces CO<sub>2</sub> in the case of fossil fuels and reduces the waste of renewable energy sources.

Irrespective of whether tax rates will include a carbon component or not, **the energy content component should reflect the energy efficiency of energy products' conversion (i.e. their use) for both fossil fuels and renewables**. This entails providing for progressive tax rates depending on the efficient use of energy products, possibly assessed via a benchmarking process: 1) Full tax exemption for energy products used in the most efficient way (e.g. via high efficiency CHP); 2) Gradually higher tax levels for energy products used in less energy efficient technologies.

## **2. Where necessary, adequately and coherently account for carbon intensities, while avoiding double taxation**

In addition to energy content (linked to the efficient use) of energy products, **adding a carbon component to tax rates may incentivise further efficiency and decarbonisation of key sectors of the economy that are not already exposed to a carbon price.**

This should be done in a coherent way based on identified gaps across existing and upcoming EU and national legislation. Policy overlap and double taxation should be avoided with respect to the following identified sectors:

- Industry and sectors already covered by the EU ETS
- Industry at risk of carbon leakage, as long as energy efficiency measures are implemented
- Heating in buildings, depending on whether EU ETS is or not extended to the building sector and in view of any national carbon pricing schemes

Should carbon taxation be implemented, it must take a system approach. This means that it must take into account GHG emissions emitted to produce the energy product as well as the amount of energy used to produce it. This would ensure that both system and resource efficiency is fully incentivised.

Member States should particularly review their energy taxes in view of setting a level playing field between various energy carriers used for heating homes or in industry, ensuring consistent price signals between the EU ETS and non-ETS. This will ensure energy poverty is not exacerbated and industrial competitiveness is not stifled.

## **3. Ensure fair treatment of high efficiency cogeneration**

Article 14 in the Energy Efficiency Directive 2012/27/EU (EED), requires Member States to assess and deliver energy efficiency potentials for energy supply, via high efficiency cogeneration. According to the EED, high efficiency cogeneration should be prioritised over the separate production of heat and electricity. Similarly, REDII, in article 29 introduces the necessity to use CHP first for the production of electricity based on biomass.

When the ETD was adopted in 2003, before the EED, RED II and even before the CHP Directive, this principle was not taken into account and it is not reflected in most Member States' energy taxation policies. Countries with high energy conversion losses, due to inefficient generation capacity, tend to set lower levels of taxation on inefficient generation of electricity in power-only plants (efficiencies of 30%) compared to efficient generation via high efficiency cogeneration (efficiencies above 75%) (see non-exhaustive assessment in the Annex).

In line with the "energy efficiency first" principle, **high efficiency CHP should be treated at least on the same level, if not better, as the separate production of heat and electricity**. This is not the case in the present ETD (based on the joint reading of Article 14 and 15), as power only plants get a full exemption of tax whereas CHP gets a partial and non-binding exemption (see annex II for a detailed analysis).

**On this basis, the revised ETD should foresee a full and unequivocal exemption from excise tax of energy products and electricity used for/produced by high efficiency cogeneration (as defined in Directive 2012/27/EU).**

#### **4. Support the uptake of energy systems integration & conversion of gas infrastructure to deliver cleaner fuels**

While the decarbonisation of electricity has been actively pursued with targeted policies over the past years, it is important that there is a roadmap for gas infrastructure to gradually decarbonise through energy efficiency and renewable/decarbonised gases uptake. Energy taxation will be key in driving these developments. **In this respect, it should be consistent in equally rewarding renewable electricity, gas and heat, as well as their efficient use and/or generation.**

Taxation regimes can be designed to maximise energy efficiency, renewable energy and system flexibility across electricity, heat and gas sectors. Taxation can also provide an important signal to optimise the investments and operation of integrated electricity, gas, heat networks. It can also foster low carbon generation, thermal and electricity storage and other conversion solutions (storage of green electricity in batteries, gas or heat networks depending on local existing infrastructure and resources). Last but not least, it should also stimulate the uptake of off-grid renewable and energy efficient solutions, to ensure that remote and rural communities are part of the energy transition.

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## Annex I Overview of energy taxation for power-only plants compared to high efficiency cogeneration plants (2018)

Please note that this is a non-exhaustive overview, based on data collected in 2018. COGEN Europe is in the process of updating this assessment. For further details, please contact COGEN Europe.

Country	Full/partial tax exemption on fuels used <u>in power only plants</u> to produce electricity (Art 14.1.a)	Full/partial taxation exemption on fuels used <u>in CHP plants</u> to produce electricity (Art 14.1.a/ Art 15.1.c)	Full/partial exemption on fuels used <u>in CHP plants to produce heat</u> (Art 15.1.c)	Full/partial taxation of <u>electricity produced</u> by CHP (Art 15.1.d)
<b>Belgium</b>	Yes, full exemption on excise levies and federal levy	Yes, full exemption on excise taxes Partial exemption on federal levy pro rata the electricity injected in the grid (if HE-cogeneration). Fuel allocation to electricity is based on official electrical efficiency of the installation	Exemption on excise taxes but no exemption on federal levy	Yes, for the electricity produced and simultaneously consumed on site No exemption for electricity that transits the grid.
<b>Czech Republic</b>	Yes (Full exemption)	Yes Full exemption, if the heat is delivered to households.	Yes (Full exemption, if the heat is delivered to households.)	No (no exemption for electricity from CHP)
<b>Germany</b>	Yes	CHP gets tax exemptions on energy products used to produce electricity under certain conditions:		No

<p>ETD implemented in Germany with the "Energiesteuerengesetz vom 15. Juli 2006 (BGBl. I S. 1534; 2008 I S. 660, 838, 1007) (1)</p> <p>Zuletzt geändert (<u>last change</u>) durch Artikel 2 des Gesetzes vom 27. August 2017" (BGBl. I S. 3299; 2018 I S. 126)</p>	<p>(separate power production &gt; 2 MW get full tax exemption for fuels)</p>	<ul style="list-style-type: none"> <li>○ Smaller tax rates on different fuels under special condition (Total efficiency &gt; 70%)</li> <li>○ Energy tax refund for CHP smaller than 2 MWel under 3 additional conditions: <ol style="list-style-type: none"> <li>1. If it qualifies as high efficiency CHP</li> <li>2. <b>and</b> yearly efficiency min. 70 %</li> <li>3. <b>and</b> not has charge off (AfA-Tabelle)</li> </ol> </li> </ul>		
<b>Greece</b>	Yes (full exemption)	Yes (full exemption)	No exemption	No exemption
<p><b>Italy</b></p> <p>Directive 2003/96/EC has been implemented by Legislative Decree 2<sup>nd</sup> feb 2007, n.26 "<i>Attuazione della direttiva 2003/96/CE che ristruttura il quadro comunitario per la tassazione dei prodotti energetici e dell'elettricità.</i>", published on Italian OJ n° 68 of 22<sup>nd</sup> March 2007</p> <p>The Legislative Decree 26 modified an existent decree,</p>	<p>Yes</p> <p>Reduced excise on fuels used for power generation. The excise rate varies according to the fuel type, as listed in poin 11 of Table A (an attachment of the TUA):</p>	<p>Yes (only partial)</p> <p>Methodology review to calculate the portion of the fuel to receive exemption delayed between 2012 and 2018. CHP plants are considered as power plant only for a portion of the fuel consumed. Thus, for CHP plants, only a minor part of the fuel is considered to be used for power generation.</p> <p>The situation in Italy is as follow: considering an</p>	No	

the Legislative Decree 26 <sup>th</sup> October 1995 n° 504 aka “TUA – Testo Unico delle Accise” (“ <i>unique excises text</i> ”). From 2007, the D.Lgs. 504 has been successively updated.		average conversion efficiency of the Italian generation system (~45.4%) of, in order to generate one kWh of power, a given (and fixed) amount of fuel is determined. The excise reduction above mentioned only applies to this part.		
<b>Poland</b>	Yes (full exemption)	Yes (full exemption)	No exemption	No exemption
<b>Spain</b> On a general basis taxation of energy products has been implemented in the Spanish Excise Duties Law	No	No Not in place. Same level of taxation than power only plants.	No Reduced level of taxation for industrial natural gas related to heat by CHP at the same level of taxation as industrial natural gas conventional use.	No Full taxation same level as other electricity sources
<b>United Kingdom</b>  ETD is enforced through the Fuel Duty, Climate Change Levy (CCL), and Carbon Price Support rate of (CCL)*	Yes – exemption from all but CPS/CCL	Yes – exempt from all	Yes – exempt from all	Yes – exempt from all





## Annex II Detailed analysis on CHP treatment according to ETD Articles 14, 15 and EU Court decision in Case C-31/17

Article 14 of the ETD mandates that Member States shall exempt from taxation “*energy products and electricity used to produce electricity and electricity used to maintain the ability to produce electricity*”, unless taxation is used for environmental policy purposes. Meanwhile, Article 15 leaves it to Member States’ discretion whether or not to exempt from taxation energy products used in the production of “*environmentally friendly*” cogeneration (*the notion of High-Efficiency Cogeneration, as defined in Directive 2004/8/EC and later the Energy Efficiency Directive, had not yet been established back when the ETD was published*). Given that the process of cogeneration concerns the combined, highly efficient production of heat and electricity, a decision that was issued by the Court of the EU in 2018 (in case C-31/17) clarified that the mandatory exemption from taxation of energy products and electricity used to produce electricity should also apply in relation to electricity produced via the process of cogeneration. This should be reflected in the revised ETD. In order to do this, a portion of the energy products that are consumed during the process of cogeneration are virtually allocated to the production of electricity (*and a tax exemption is applied in relation to these energy products*), whereas the remaining energy products are allocated to the production of heat. However, this still means that Member States retain the discretion to tax the portion of the energy products that is allocated to the production of heat. This essentially leads to **penalizing** an energy-efficient technology such as CHP, when compared to the full, mandatory exemption applied to conventional electricity generation (*possibly combined with a full exemption for energy products used in the -stand-alone- production of heat by energy-intensive industries as prescribed in art. 17par. 2 of the current Directive*). The aforementioned EU Court decision in Case C-31/17 stresses the significant role of CHP in achieving the EU’s environmental objectives and calls for unambiguous incentives for the promotion of this technology, including through the taxation of energy products (*see points 33 of the decision*). Therefore, also taking into account the significant role that CHP can play in boosting the competitiveness of energy-intensive industries, as explicitly recognized in the Energy Efficiency Directive (2012/27/EU, *see Article 14 and recitals 35 & 38*) as well as the massive untapped potential for this technology in the EU, **the revised ETD should foresee a full and unequivocal exemption from excise tax of energy products and electricity used for high efficiency cogeneration** (*as defined in Directive 2012/27/EU*).

Finally, given that the ETD was adopted in 2003, before the initial CHP Directive (which dates back to 2004), the revised ETD should adopt the EED definition (or refer to Directive 2012/27/EU) to distinguish ‘*environmentally friendly*’ CHP, namely “high-efficiency CHP”.