



Bringing Energy
Together

Impacts of CPS on CHP - Briefing note

The current value of CHP to industry and the UK economy

CHP simultaneously generates heat and power (electricity) in a single highly efficient process. CHP is fuel-neutral with a range of plant designs that utilise renewable or fossil input fuel. Whatever the feedstock, **CHP represents the optimal use of that fuel**. With significant deployment across industry, CHP is already providing cost effective carbon abatement and supports the industrial competitiveness and employment for companies operating in a global marketplace.

- The CHP industry **supports 116,000 people**, which could double as installed capacity reaches Governments anticipated capacity of 11.3 GW by 2020.¹
- **80% of the CHP capacity is installed on industrial sites** principally in the refining, paper and chemicals sectors. In these sectors around half of the sites use CHP.
- The 6 GW CHP capacity installed to date **saves 13 million tonnes of CO₂ per annum and meets 7% of the UK's power requirements**
- The high efficiency of **CHP currently reduces UK gas imports by 5%** (32.6 TWh/year) contributing to the **security of energy supply**
- The UK Government said of CHP ***“CHP provides one of the most cost-effective approaches for reducing CO₂ emissions and plays a crucial role in the UK Climate Change Programme.”***²

The proposed policy changes

Policy Changes announced at Budget 2011, and due to come into force in 2013, are set to reduce dramatically the viability of existing CHP plant and the sites where they operate. All significant CHP new build has halted in response to the announcements. The policy changes are:

- **Introducing the Carbon Price Support (CPS) tax on all fuel inputs to CHP.**
The CPS tax is designed to ensure a stable carbon price in the wholesale electricity market
 - All fossil fuel used in power stations will be liable for the tax as it is all used to make electricity
 - None of the fuel use in boilers (making heat) will be liable for the tax
 - **All of the input fuel for CHP plants will be liable** both fuel for electricity and fuel for heat. **It is this liability for fuel used for heat generation that unfairly penalises CHP plant.**

¹ DECC updated energy and emissions projections, October 2011

² HMRC Notice CCL1/2 July 2010

- **Removal of the CHP Levy Exemption Certificate (LEC)**. The LEC is a tradable certificate which enables CHP power exported to the grid to be exempted from the Climate Change Levy. The value of a LEC is £4.85/MWh.
 - CHP LECs encourage CHP power export, which drives the maximum energy efficiency, hence carbon savings, of CHP plant.
 - LECs were introduced in 2003 and extended until 2023 in 2009. Significant industrial CHP capacity has been built in response to the LEC.

The policy changes are retrospective, applying to existing plant and reversing guarantees of support until 2023 and made by the Government in 2009. The removal of LECs was an un-consulted change with no warning given to industry.

The Government's stated aim and proposed response

The Government proposed giving CHP a measure of relief from the CPS *'so that on balance CHP remains incentivised through public subsidy.'*

- Working with DECC, HMT and HMRC officials, the CHPA has developed (and fully shared) comprehensive analysis of the policy proposals. The modelling shows that **no industrial CHP plant can retain the same level of incentive through a CPS relief of 100% or less** (relative to separate generation of heat and power).
- **Government modelling of outputs, failed to account for the main issue with the CPS**, that tax on fuel used for heat cannot be recovered in the electricity market.

The policy impact and what CHP needs

If the current policy proposals are implemented, **CHP plant will cease exporting electricity to the grid, whilst others will shut down** entirely. The **cost to CHP dependent industrial sites will rise**, harming competitiveness and threatening jobs. **Carbon emissions** from generation and **UK gas imports will also rise, compromising security of supply** and carbon commitments. The current proposals are a result of a short term cost pressure which will undermine both new and continued industrial competitiveness and efficiency.

The industry has three simple proposals to ensure that CHP plants remain incentivised:

- Exempt the fuel used for heat generation in CHP from the CPS
- Retain the CHP Levy Exemption Certificate until 2017
- Replace the LEC with an enduring direct support mechanism within DECC's current energy policy work.

CHP offers a technology for energy users to participate cost-effectively in the decarbonisation agenda, to improve resource efficiency and to enhance competitiveness in the international marketplace. With the right policy framework Government could open up a new front to tackle climate change whilst visibly reinforcing industrial growth.

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