

# The United Kingdom's GHG emissions reductions policies

The United Kingdom has a comprehensive policy package to help it achieve its bold goals of reducing greenhouse gas emissions by 80 percent by 2050 (relative to a 1990 baseline). Policies are supported by a suite of tools and programs that can help drive industry towards a clean energy future.

#### **ENERGY PROFILE**

Industrial energy consumption accounts for about 19 percent of the United Kingdom's total final energy consumption. This figure is considerably lower than many other industrialized countries – such as Finland (41%) or Sweden (37%).

Approximately 50 percent of the final energy use in UK's industry sector is consumed by energy-intensive industries.



FIGURE 1: The UK manufacturing industry's final

### **National targets**

The 2008 Climate Change Act established a legally-binding target to reduce the UK's greenhouse gas emissions by at least 80 percent by 2050 (from the 1990 baseline). To give the UK a pathway towards this target, the Act introduced a system of carbon budgets that have legally-binding limits on the amount of emissions which may be produced in successive five-year periods, beginning in 2008. The first three carbon budgets were set in law in 2009 and require emissions to be reduced by at least 34 percent below 1990 levels by 2020. The UK intends to use the EU Emissions Trading Scheme (EU ETS) to meet over 50 percent of this 2020 target. The fourth carbon budget, which covers the period 2023-27, was set in law in 2011 and requires emissions to be reduced to 50 percent below 1990 levels.

### **Policy structure**

The UK has a suite of policies in place to help achieve its GHG targets. While there are a number of EU directives that the UK must comply with as a member state, such as the EU Emissions Trading System (EU ETS), it also has its own system of voluntary climate change agreements (CCAs, see *Effort-defining policies*). The CCAs and EU ETS are supported by a number of policies that include both mandatory and financial supporting measures focused on incentivizing industrial energy efficiency. Importantly, the UK has developed comprehensive tools to help industry implement the various policies. These include databases of new technologies, reporting and monitoring tools, verification guidance, and helpdesks for companies.

## **Policy types**

The Institute for Industrial Productivity offers a framework for industrial energy efficiency policy packages. The pyramid below goes beyond just listing policies and instead illustrates a layered analysis according to a "policy pyramid", which connects various policies, measures and implementation tools.

#### IIP POLICY PYRAMID

#### Effort-defining policies

Interventions that motivate and drive energy efficiency, energy savings or GHG emissions reduction.

Supporting measures Carrot-and-stick policies that encourage action and address or alleviate barriers.

Implementation toolbox Guidelines, tools, templates etc. that support the above policies.

## Effort-defining policies

The UK's voluntary climate change agreements (CCAs) are one of the country's central effort-defining policies for industry. They aim to improve the energy efficiency of industry while also protecting competitiveness. Most targets within the CCAs are negotiated between sector associations and the Secretary of State in the form of umbrella agreements. There are also some individual agreements between the Department of Energy and Climate Change and facility operators. While the CCAs are voluntary, an important incentive for companies is a 65 percent discount on the Climate Change Levy (see *Supporting measures*).

The EU ETS is perhaps the single-most important mechanism for the UK to be able to achieve its 2020 targets for industry. Introduced in 2005, the EU ETS sets a cap on total direct GHG emissions for industrial companies that emit above a specified threshold (mostly energy producers and heavy industry).

The CCAs and the EU ETS are supported by the EU Product Ecodesign Directive and the Energy Efficiency Directive. The EU Product Ecodesign Directive mandates standards and/or labels on agreed industrial equipment. The EU Energy Efficiency Directive was adopted by the UK in 2012. It has legally-binding measures to ensure Member States use energy more efficiently and it sets national targets to be achieved by 2020. Measures include mandating energy audits and management plans for large companies and requiring Member States to create incentives for SMEs to undergo energy audits.

## Supporting measures

The Climate Change Levy (CCL) was introduced in 2001 at the same time as the CCAs. Both policies both work together as a package. The CCL is a tax on the business use of energy, therefore providing an incentive to be more energy efficient. It applies to all energy consumption across industrial, commercial and public sectors, and different rates apply to different sources of energy. The CCL drives sectors to enter into CCAs, as participating energy-intensive companies are granted a 65 percent tax rebate if they meet specific targets.

The UK's additional supporting measures:

- The Combined Heat and Power (CHP) quality assurance program, which ensures CHP installations meet minimum efficiency thresholds
- The Pollution Prevention and Control Act, which transposes the requirements of the Integrated Pollution Prevention and Control Directive
- The Green Deal, which enables energy companies to access finance for the upfront costs of the efficiency measures targeted in the residential, services and industrial sectors. Repayments are collected through the customers' energy bills
- The Enhanced Capital Allowance Scheme, which provides companies with a tax relief for investments in eligible energy efficient equipment.

## Implementation toolbox

The UK government has developed a comprehensive implementation toolbox to support industry to meet the requirements of its various policies. These include the Energy Technology Criteria List and the Energy Technology Product List; guidance on the best-available technologies, target setting, monitoring and verifying emissions, and reporting on annual achieved savings; and templates for monitoring plans.

This factsheet is based on data from IIP as well as other sources. For more information about industrial energy efficiency and GHG policies in the UK, and a full list of references, please visit the IIP Industrial Efficiency Policy Database: **www.iipnetwork.org/databases/policy** 

