

Press Release

Tel: +44 (0) 20 7291 4800
Fax: +44 (0) 20 7323 4780

mailbox@ifs.org.uk
www.ifs.org.uk

7 Ridgmount Street
London WC1E 7AE

Inconsistent taxes on energy use raise costs of meeting carbon targets and need to be overhauled

Recent headlines have focussed on energy prices faced by households. Government policy has increased those prices. It has increased prices faced by business by rather more. This has mainly happened because this government and the last have committed to legally binding carbon reduction targets to tackle climate change.

The best way to achieve these targets would include a single, consistent carbon price. But that is not what we have. Existing policies impose very different costs on different energy users. Businesses are taxed more than households. Electricity is taxed more than gas. A more rational and straightforward policy would impose a uniform carbon price. Instead the current system is complex and incoherent and less effective than it could be at reducing carbon emissions at the lowest overall cost.

These are among the findings of a new report published today by the IFS, in collaboration with the ESRC Centre for Climate Change Economics and Policy, and funded by the Esmée Fairbairn Foundation and the Economic and Social Research Council (ESRC). It suggests how taxes and charges could be rationalised, reducing emissions at no additional cost and without, on average, lower income households being made worse off.

Carbon prices under existing policies are inconsistent

Household electricity bills are increased by a whole range of taxes and charges: the EU Emissions Trading System (EU ETS), Carbon Price Floor (CPF), Renewables Obligation (RO), Feed-In Tariffs (FITs), Warm Home Discount (WHD), and Energy Company Obligation (ECO).

These increase the costs of using electricity by about 2p/kWh (16%), and can be seen as an indirect way of charging for the carbon emissions generated. They imply a carbon price of £59 per tonne of carbon dioxide equivalent (tCO_{2e}). This is remarkably close to the government's target carbon price for 2013¹. But VAT is imposed at the reduced rate of 5% implying a significant subsidy relative to a world in which VAT was charged at the standard rate. Take account of that and an effective carbon price of just £6/tCO_{2e} is charged on household electricity use.

Gas use by households is by contrast subject to only WHD and ECO. But it still enjoys the effective VAT subsidy which more than offsets these charges – in other words there is effectively a negative carbon price on gas use.

¹ Guidance from the Department for Energy and Climate Change provides a 'target price' for one tonne of CO_{2e} that is needed in order to meet our domestic emissions reductions targets. This does not apply to sectors which are covered by the EU ETS, which are subject to a separate target.

Embargo

Until 00.01 am
Friday 1 Nov 2013

Contacts

Bonnie Brimstone
Institute for Fiscal Studies

020 7291 4800
07730 667013

Director:
Paul Johnson

Research Director:
Richard Blundell

The Institute for Fiscal Studies
Limited by Guarantee,
Registered in England: 954616
7 Ridgmount Street
London
WC1E 7AE

Registered Charity: 258815
VAT no: GB 394 5830 17

Businesses pay much higher effective carbon taxes and face a complex array of different policies. As well as indirectly paying the ETS, CPF, RO, and FITs through their electricity bills, businesses face the Climate Change Levy (CCL), (potentially with a Climate Change Agreement (CCA) which entitles them to a CCL discount), and in some cases also the CRC Energy Efficiency Scheme (CRC).

Just listing the range of schemes which affect households and businesses is an illustration of the problem. This leads to very different effective carbon prices:

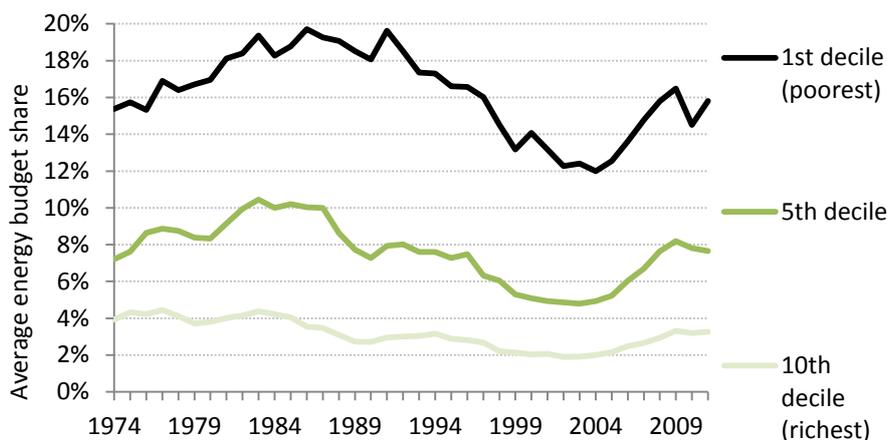
- Households face a carbon price of £59 per tonne CO₂e on electricity consumption and £13 on gas ignoring the VAT “subsidy”. These fall to £6 and -£19 if you take it into account;
- A medium-sized non-energy-intensive business faces a carbon price of £69 on electricity and £22 on gas.

On current plans (i.e. following stated policy) divergences will grow. By 2020 medium-sized businesses could face an electricity carbon price of £121 per tonne CO₂e, well above the 2020 carbon price of £65 which the Government considers to be consistent with the UK’s long-term goal of reducing its emissions by 80% by 2050 compared with 1990. Policies have already had a much bigger effect on business energy prices than on household energy prices – with inevitable knock on effects on wages or prices. Not only that, but businesses face a hugely complex array of different policies. Simplification is both possible and desirable.

For households distributional concerns are crucial

Energy costs account for 16% of the spending of the poorest (lowest spending) decile but only 3% of the richest. Recent price rises have hit poorer households hardest. The figure below shows how these budget shares have changed over the last forty years. While energy costs have become more important over the past few years in historical perspective they remain lower as a proportion of total spending than they were through much of the 1980s.

Figure: Energy budget shares by expenditure decile, 1974 to 2011



Announced policies are set to increase prices further. But this will not lead to a rationally designed structure. A more rational system, which would involve a carbon tax on gas and the introduction of VAT at the full rate, would of course be difficult to implement. But it would not involve changes any bigger than we have seen over the past few years. Our report shows it could involve

the use of the additional tax revenues to help poorer households. This has not been a feature of recent policy. We show that it is quite possible to use the direct tax and benefit system to compensate poorer households on average for increased energy prices in a way which increases overall progressivity and redistribution.

Governments will have to decide how transparent they want the system of energy taxation to be and exactly what their distributional objectives are. The current system is certainly not transparent. Taxing businesses more just hides the fact that households pay in the end.

Arun Advani an author of the report said: "The main parties are agreed on the case for significant cuts in carbon emissions. That will have to be paid for. The cheapest and most efficient set of policies will include a consistent carbon price. Other policies may look more attractive but will cost households more in the end."

Professor Sam Fankhauser, Deputy Director of the Centre for Climate Change Economics and Policy and Co-Director of the Grantham Research Institute on Climate Change and the Environment at London School of Economics and Political Science, said: "Our analysis also shows that Government could make the measures and regulations that apply to businesses simpler and more consistent. For instance, there are cases in which companies are charged for their carbon emissions several times over through overlapping policies. Reducing the number and complexity of such measures would cut costs and make the whole system more effective."

ENDS

Notes to Editors:

1. The report, 'Energy use policies and carbon pricing in the UK' will be launched at an event in Westminster at 9:30am on 1 November 2013 (<http://www.ifs.org.uk/events/968>). For embargoed copies of the report or other queries, contact:
Bonnie Brimstone at IFS: 020 7291 4800 /07730 667013, bonnie_b@ifs.org.uk;
2. The research was funded by the Esmee Fairbairn Foundation and the Economic and Social Research Council. Work conducted by IFS researchers was done so with funding via the ESRC Centre for the Microeconomic Analysis of Public Policy (CPP), hosted at IFS.
3. The ESRC Centre for Climate Change Economics and Policy (<http://www.cccep.ac.uk/>) is hosted by the University of Leeds and the London School of Economics and Political Science. It is funded by the UK Economic and Social Research Council (<http://www.esrc.ac.uk/>). The Centre's mission is to advance public and private action on climate change through rigorous, innovative research. The Grantham Research Institute on Climate Change and the Environment (<http://www.lse.ac.uk/grantham>) was launched at the London School of Economics and Political Science in October 2008. It is funded by The Grantham Foundation for the Protection of the Environment (<http://www.granthamfoundation.org/>).