



A series of background briefings on the policy issues in the June 2017 UK General Election

Brexit as Climate Policy: The Agenda on Energy and the Environment

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#GE2017Economists



CEP ELECTION ANALYSIS

Brexit as Climate Policy: The Agenda on Energy and the Environment

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- All parties acknowledge that climate change is a bad thing and needs to be addressed. They all also acknowledge that high energy prices are an issue for UK households and businesses.
- The Conservatives offer little policy detail apart from vowing to support shale gas, a technology that the other parties would ban outright.
- Labour wants to part-nationalise the energy sector. This is based on the idea that high energy prices are the consequence of unfair practices by energy retailers and suppliers, but there is not much evidence for that claim.
- Lighter touch regulation seems more appropriate in this area along with directly targeted support of the ‘fuel poor’, proposals that feature in both the Labour and Liberal Democrat manifestos.
- Further integration with European energy markets is also a sensible strategy to keep power prices lower in the UK. But only the Liberal Democrats are sensitive to this issue and its delicateness in the context of Brexit.
- All parties express support for the legally binding climate targets that the UK has set itself. To some extent, this is ‘cheap talk’ as the targets have been generously met so far. But this was primarily due to a weak economy. It is not clear that the targets will be so easily met in the future – unless the worst-case scenarios for the damage caused to UK GDP by Brexit are realised.
- The parties offer no detail about how climate policy could be tightened in the future to ensure that the targets are met. Moreover, Brexit could lead to a vacuum in climate policy-making as the UK would be likely to leave the European Union’s emissions trading system (ETS), which currently regulates nearly half of emissions.
- More attention should also be given to how the UK’s dismal performance in clean innovation could be improved. Because of higher knowledge spillovers in this area, such a strategy could also help to improve economic growth.
- Promising a carbon price of at least £50 per tonne of carbon along with a spending target for clean research and development (R&D) could provide a useful addition to the policies offered in the manifestos.

What do the manifestos say?

Once upon a time – not so long ago – the UK’s political parties were barely distinguishable when it came to energy and climate policies. Not anymore: while similarities remain, the manifestos offer some stark differences in their treatment of this policy area.

Let’s start with the similarities: all the parties that had MPs at the end of the last parliament say that addressing climate change is important. They also confirm their commitment to both the UK Carbon Budgets as well as the United Nations climate change process and its latest agreement, made in Paris, setting out voluntary emissions reduction targets among other things. Indeed, it fell into Theresa May’s short pre-election term of office as PM to ratify the Paris Agreement last November.

All the manifestos also express some concern about high energy prices. In the case of the Conservatives, this is primarily in reference to the competitiveness of industry relative to other European countries. The other parties are more concerned about high energy prices for poor households.

But there is a striking difference in the level of detail and concreteness this policy area receives in the different manifestos. The Conservative manifesto mentions climate change about four times and two of those are merely to express that the UK should be a world leader when it comes to climate change, without specifying exactly what this entails. The Labour and Liberal Democrat manifestos mention climate change ten and nine times respectively and provide more policy detail.

In terms of concrete policy measures, the Conservative manifesto confines itself to precisely three things: first, support for shale gas development, including easing of existing regulations; second, opposition to onshore wind farms; and third, an independent review into what is going on with fuel prices coupled with a statement to ‘possibly’ have some form of cap on fuel prices for certain poorer households.

In stark contrast, both Labour and the Liberal Democrats oppose shale gas development categorically. They also support the development of tidal power and mention carbon capture and storage as something they want to promote.

Perhaps the most revolutionary proposal in this area comes from Labour, which proposes to renationalise the energy sector at least partially. The idea is that publicly owned energy companies operate alongside private ones, offering customers a fairer deal.

On the same issue of potentially high and unfair pricing for households, the Liberal Democrats propose to ensure that there are no undue barriers for market entry in the electricity sector.

To deal with so-called ‘fuel poverty’ arising from high fuel prices, both Labour and the Liberal Democrats provide a number of further specific proposals. Labour wants to introduce a £1,000 cost cap for ‘the average dual fuel household’. Labour also promises interest-free loans to make homes more energy efficient.

Both Labour and the Liberal Democrats recognise that tariff and barrier free access to European energy markets is an important avenue to keep energy costs down in the UK and promise to make sure that such access is continued and deepened after Brexit. Along with the Liberal

Democrats, Labour also promises insulation retrofits for four million homes within the next parliament.

Finally, the Liberal Democrats add some tightening of various energy and climate-related targets, including:

- Reducing greenhouse gas emissions to zero by 2050 (current legislation requires an 80% reduction).
- A zero-carbon standard for new homes.
- A target to have all homes on at least current level C in terms of energy efficiency by 2035.
- A target of having 60% of energy from renewables by 2030. A key measure to achieve this would be to re-establish support for micro-generation that was cut by the Conservative government at the end of 2015.

The Liberal Democrats are also calling for a dedicated public investment bank for investments in housing and infrastructure to promote – among other things – a transition to a cleaner economy.

Targets

All parties say they are committed to UK Carbon Budgets. How is the UK doing in that respect? Figure 1 shows actual and projected greenhouse gas (GHG) emissions, GDP and GHG intensity (that is, GHG over GDP) all relative to 1990 levels. The blue lines show the various Carbon Budgets as specified by the [Committee on Climate Change](#). At present, the UK is comfortably on target, requiring an emissions reduction of 35% (relative to 1990) by 2020. Indeed, in 2016 emissions already implied a 38% reduction.

But is the country on track to meet targets going further? To answer this, it is instructive to note that the main reason that the UK is so comfortably within its Carbon Budgets is the Great Recession after 2008. Yes, emissions reduced somewhat because of reductions in carbon intensity (on average by 4% per year) but the UK would not have met its targets if GDP had continued on its pre-2008 growth path as illustrated by the grey dashed line.

Equally, in going further, much will depend on what happens to GDP. Although this seems increasingly unlikely, if the UK should somehow catch up to its pre-crisis growth path, it is likely to miss the carbon targets without any further policies that can lead to faster carbon intensity improvements. Indeed, even if there is no catch-up at all and the economy continues on its current path (pink), it is likely that the targets will be missed between 2020 and 2030.

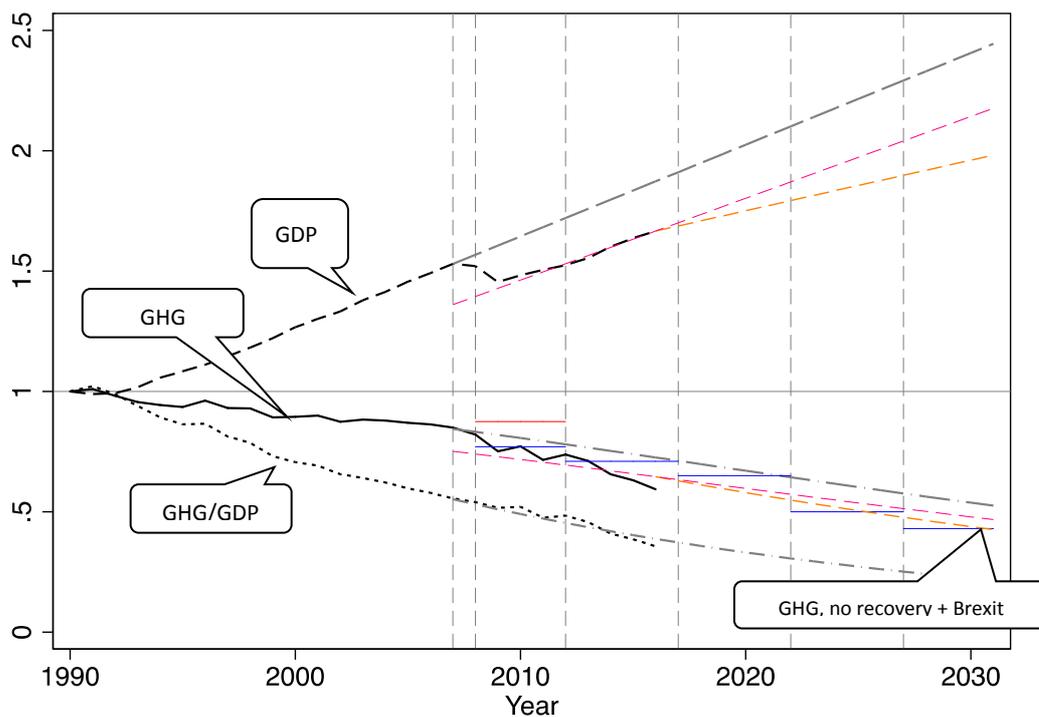
The only way the targets might be met is if the Brexit effect on growth is sufficiently hard. The orange lines in Figure 1 show what happens if Brexit depresses UK growth to an extent that GDP is 8% lower (corresponding to the mid-point in the range of scenarios of the original CEP Brexit analysis). Hence, any party aiming – or hoping – for milder Brexit effects should also be thinking seriously about policies to make climate policy more stringent, if they indeed are committed to the Carbon Budget targets.

Remarkably, there is little such discussion in the manifestos. How is the UK going to meet those targets? By having higher carbon taxes (for example, a higher Climate Change Levy with

fewer exemptions)? By having higher implied subsidies for renewables via the Contracts for Difference Scheme?

The lack of a concrete discussion of climate policy is even more baffling in the context of Brexit: nearly half of carbon emissions are regulated via the European Union's emissions trading system (EU ETS). What are the parties planning? To remain in the EU ETS? To leave it and replace it with something else?

Figure 1: GHG emissions and projections



Prices

All parties also express concern over energy prices. Figure 2 shows how UK energy prices have been developing in recent years.

There has been a price increase of about 100% in the last 10 years or so. So it is not surprising that some people are concerned about energy prices. That said, UK prices are not particularly high by international comparison (particularly relative to Europe) nor has the recent price increase been more dramatic here than elsewhere.

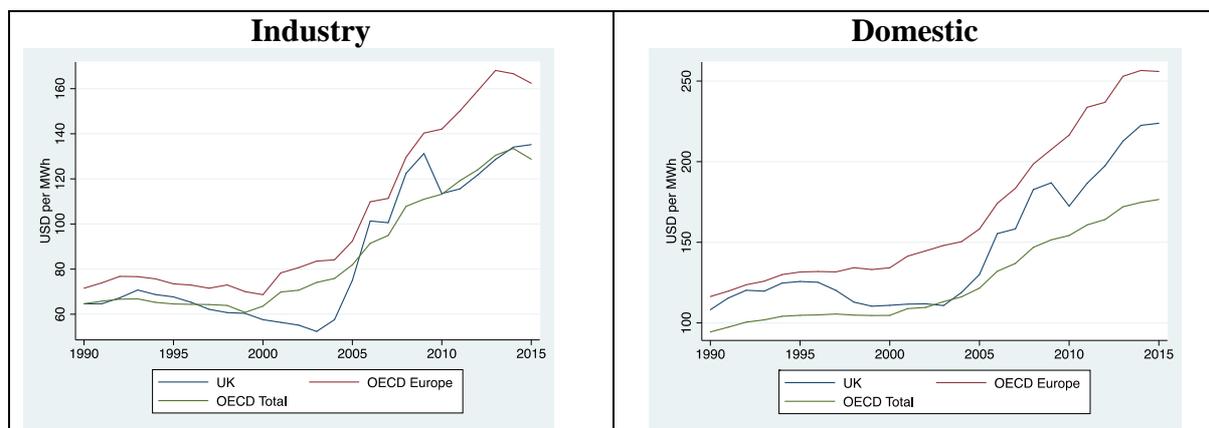
In other words, what the UK is experiencing is primarily due to global developments in fuel prices rather than any deviant behaviour of UK energy companies. It is therefore unlikely that public ownership – as proposed by Labour – or across the board price caps could lead to a more sensible situation.

Moreover, even if there was some element of market power behind high prices it is not clear why such issues could not be addressed by the usual mechanism for dealing with that – the Competition and Markets Authority (CMA). Indeed, only recently the CMA looked at energy markets in detail, [concluding](#) that there were only minor issues that needed addressing.

But of course for struggling families, it is presumably of little comfort that they are *not* struggling because of the market power of power companies. Hence, direct targeted subsidies for energy efficiency improvements, as proposed by both Labour and the Liberal Democrats, and targeted price caps as proposed by the Conservatives.

A ‘low hanging fruit’ to ensure cheaper power prices in the UK would come from better integration with European power markets. The potential gains from integration would improve even further as larger amounts of power are generated from sometimes intermittent renewable sources. Of course, Brexit is potentially a major obstacle in realising those gains. The Liberal Democrat manifesto shows some sensitivity to this by promising to make sure that the UK has the closest integration into the European markets irrespective of Brexit.

Figure 2: Electricity prices – UK vs OECD



Leadership

The Conservative manifesto is characteristically obsessed with UK leadership in climate change of course without spelling out what that exactly could mean. Let’s look at some things it could mean.

Figure 3 reports per capita emissions as well as emissions intensity (carbon emissions over GDP). On both counts, the UK is doing much better than the United States or Japan say. But relative to other European countries, the UK is only average. Things look better at first in terms of per capita growth of emissions. The UK reduced its per capita emissions by more than any other advanced country in recent years. But these are the emissions that directly originate from the UK.

Many have argued that a fairer way to look at emissions should include emissions due to the products that a country consumes. In other words, it can hardly be considered a success if emissions only reduce because production of emissions-intensive goods shifts abroad.

Figure 4 reports both production and consumption emissions for selected countries. What is striking is that the UK’s consumption emissions have by and large been constant for the last 20 years or so. What’s more, the gap between production and consumption emissions is particularly large for the UK. This would suggest that the leadership role of the UK in emissions reductions is more by coincidence rather than by design: the UK’s comparative advantage is primarily in less energy-intensive services. As a consequence of this, the decline of the

manufacturing sector is more pronounced than in other comparable economies. This has helped UK production to ‘decarbonise’ but has not reduced UK consumption.¹

Figure 3: Per capita emissions and growth of per capita emissions

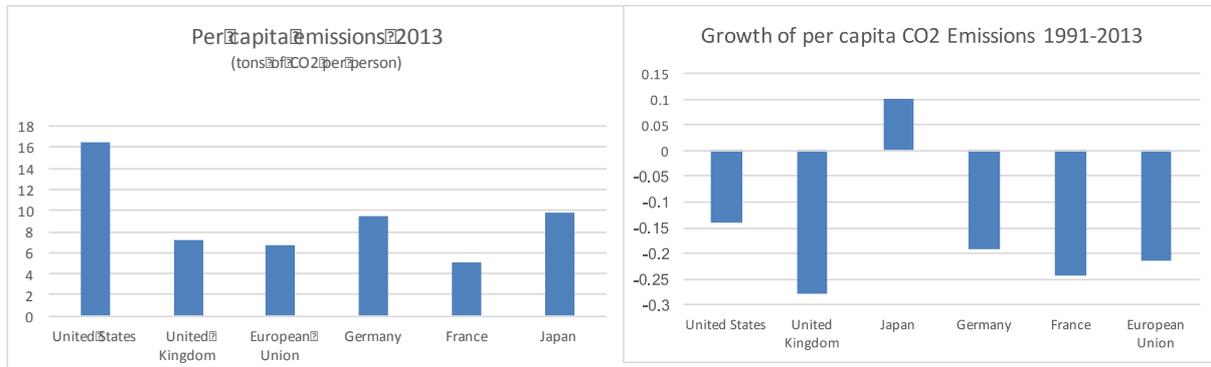
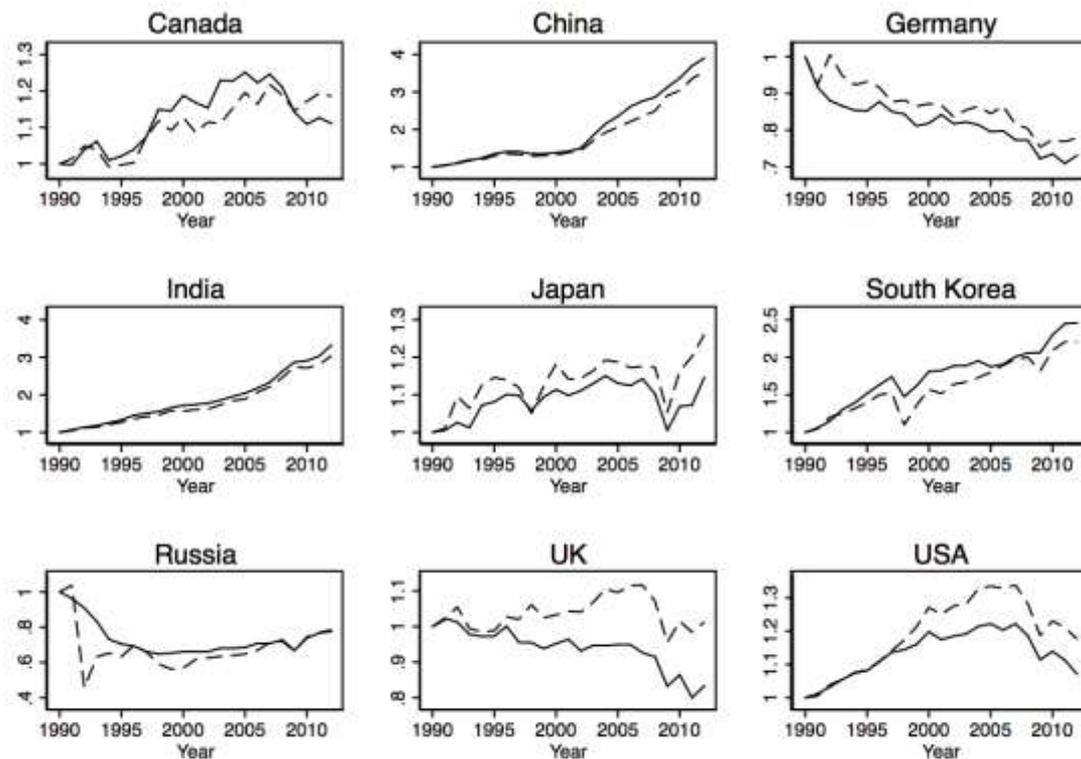


Figure 4: Production versus consumption emissions



Notes: Solid lines are production emissions, dashed lines are consumption emissions. The data are updated from Peters et al, 2011. For an explanation of the issues around consumption emissions, see Peters et al, 2012.

Source: [Global Carbon Budget 2014](#).

Another important area for leadership could be clean innovation. This is important for two reasons. First, climate change is global. Progress in the UK alone – however strong – has very

¹ Indeed, closer inspection suggests that changes in the UK’s manufacturing share in GDP can account for as much as 60% of changes in emissions.

little impact on the actual climate. But this is different if the UK develops new technology that will make clean options cheaper to adopt.

Second, [CEP research](#) suggests that developing new clean technologies can potentially have positive effects on growth – rather than just increasing costs through regulation and putting a price on carbon. This is due to seemingly larger knowledge spillovers in clean technologies. Hence, this provides a win-win argument for countries with leadership ambitions in this area.

But things don't look good in that respect for the UK. It lags behind most major economies in terms of innovation in clean technologies (see Figure 5). This likely due to a less stringent support for deployment as well as research and development (R&D) in renewable technologies (see Figures 6 and 7).

Figure 5: Low carbon innovation compared

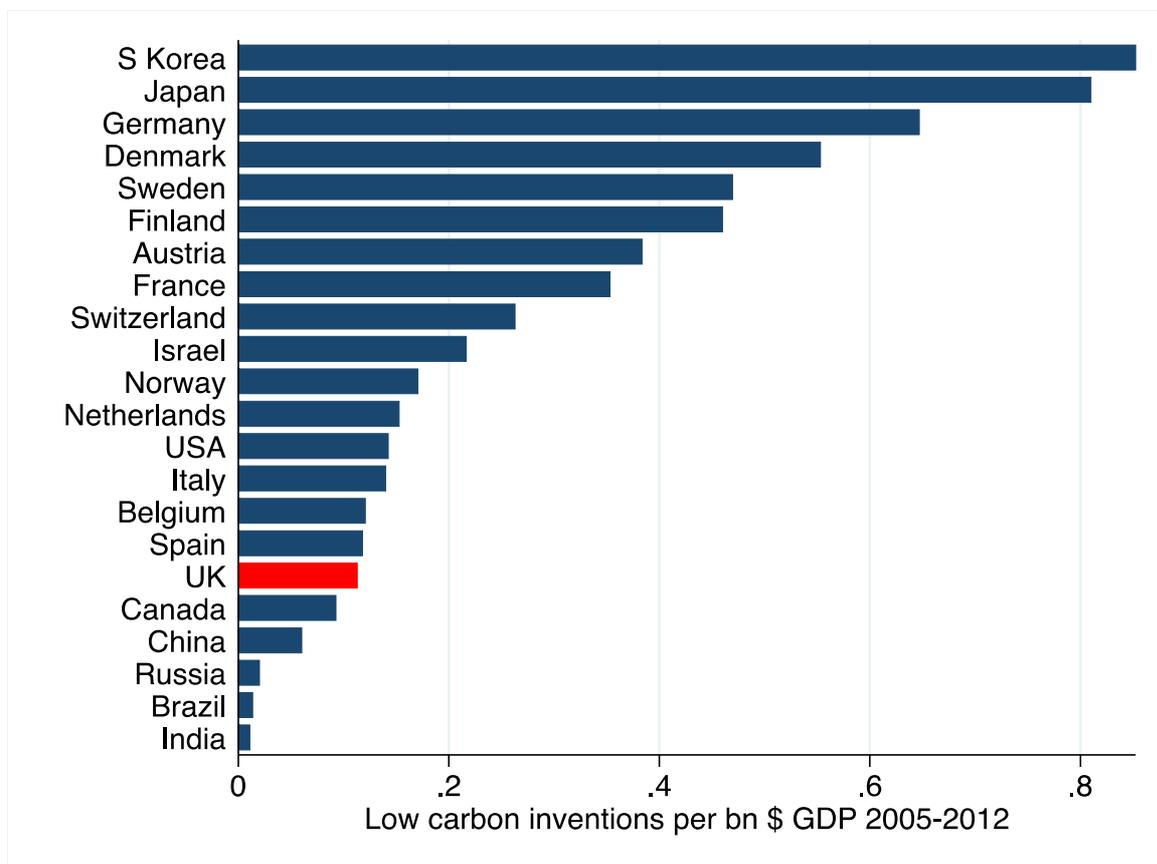
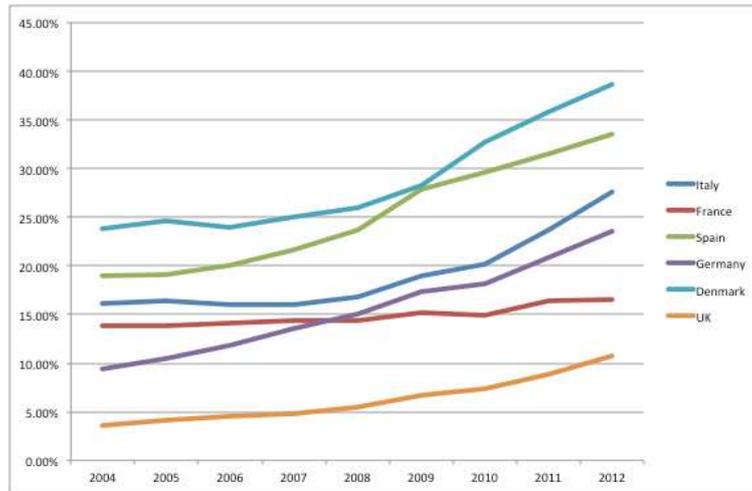
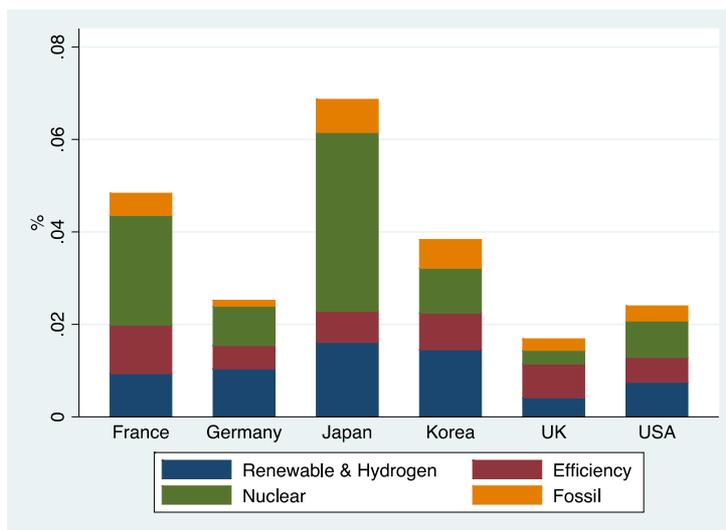


Figure 6: Share of electricity generated from renewable sources in major EU countries



Source: Authors' calculations based on Eurostat data.

Figure 7: Share of government R&D spending on energy technologies



Source: Authors' calculations based on International Energy Agency data.

Conclusion

All parties express concern for climate change as well as high energy prices. In the case of the Conservatives, this concern is backed up by little policy detail – apart from vowing to offer special support for fracking and shale gas while the other parties want to ban this technology altogether.

Labour and the Liberal Democrats offer more detail, including some fairly radical proposals such as a part renationalisation of the energy sector by Labour.

This could be indicative of how seriously the different parties will take the energy and climate agenda after the election. Conservative threats to create some kind of tax haven economy certainly wouldn't sit very well with a strong focus on climate.

But all the parties' manifestos raise more questions than answers. So far, the UK has met its climate change obligations probably more by (bad) luck rather than design. The Great Recession and a sluggish economic recovery were instrumental in meeting the climate change targets set by the Climate Change Committee.

Without more drastic policy interventions, it is unlikely that the targets will be met – unless the more extreme forecasts for the impact of Brexit on economic activity materialise. But none of the parties offers much clarity on how climate policy could or should be strengthened.

Moreover, most Brexit scenarios would see the UK exiting the EU ETS, which is a key instrument of climate policy all over Europe, including the UK. No party seems to offer any suggestions as to what would come instead.

Finally, little comment is provided on how the UK could improve its relative weakness in clean innovation. This would not only be a sensible strategy to affect emissions beyond the UK's borders. It could also form part of a strategy to improve sluggish UK growth and productivity. It would seem imperative for the UK to increase its public R&D spending in this area. This could be financed by increasing carbon prices (for example, via the Climate Change Levy) as well as removing commonplace exemptions from carbon pricing (see Martin et al, 2014).

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Further reading

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