

Clean Growth Strategy – analysis from Friends of the Earth

The Government published its [Clean Growth Strategy](#) today, 12th October 2017. It also published a slew of other related documents and strategies. **Health warning – the following analysis is based on a very rapid read-through of today’s announcements.**

Summary:

Area	Verdict
Strategy and framing	Excellent focus on huge economic opportunities for UK from action on climate change. But no mention of action needed to meet Paris 1.5 degree target
Meeting the legal carbon budgets	Does not meet either 4 th or 5 th carbon budgets, stronger policy needed across the board. Very worrying implication of using "flexibility" to meet budgets, rather than more action.
Business and industry	Strategies for 7 energy-intensive sectors very welcome; insufficient policy to support business energy efficiency.
Homes	Best case sees 19% reduction in emissions by 2032, but lots of vague promises of policy. Extension of ECO is the main policy, lots of consultations planned on regulations, green mortgages. Not clear if Renewable Heat Incentive will deliver scale of heat pumps and renewable heat needed. Best scenario just about meets CCC recommendation, but will need additional policy.
Transport	CCC calls for 44% reduction in emissions, CGS only plans for 29% reduction, and not sure how it gets there - relying a lot on EVs to just take off, which they may well do (says EVs may be 30-70 percent of sales. Not clear what they do if only 30 percent etc). Completely inadequate on aviation, and worrying noises about doubling "sustainable" biofuels.
Power	The strongest sector, good news for offshore wind, flexible grids and interconnectors. Suggests 85% "clean" power by 2032 (but includes nuclear). Little for communities, decentralised renewables etc. Some movement on CCS but not huge investment, mostly focused on industrial sector. Apparent update on solar policy later this year.
Natural resources	Wide ranging section, covering agriculture, forestry, farming, food, resource use and waste; overall, the policies here are in need of much further development
Public sector	Given the potential, and the very limited progress anticipated to 2025, the lack of increased policy support is a disappointing missed opportunity.
Fossil fuel production	No section in the strategy on this. The UK’s current strategy is to "maximise production" of North Sea Oil and Gas, yet the Government acknowledges that most of the world’s existing fossil fuel reserves need to stay unburned to meet the Paris climate goals. Zero mention of shale gas is possibly progress, given large section devoted to it in the Conservative Manifesto.
Governance	The reinstatement of a regular Clean Growth Inter-Ministerial Group is very welcome. The indicators of progress miss key sectors, and in places need to include measures of absolute emissions, not just emissions relative to GDP.

Strategy, framing and meeting the legally binding carbon budgets

In our view there were two clear tests for this strategy:

- Does it give a clear signal to investors, business and the public that the Government has a serious, bankable long-term strategy for tackling climate change;
- Does it set out how we will meet our legally binding 4th and 5th Carbon Budgets (5CB) for 2023-2027 and 2028-2032, and pave the way for the deeper cuts needed to meet the Paris Agreement?

On the first question, the answer is a clear and very welcome "yes". The tone of the strategy is a marked positive improvement on how climate change has been treated by the Conservative Party in the recent past. Gone is the language that climate change action is a cost, and its place comes a strong narrative that tackling climate change brings massive economic opportunities which the UK is already seizing, and the intention is to accelerate. This represents a major victory for progressive forces in the Conservative Party over elements such as Nigel Lawson and the increasingly marginal Global Warming Policy Foundation. The response from organisations [such as the CBI](#) has been to welcome this strategic clarity.

On the second question, the answer is a worrying "no". The report sets out that the new policies and proposals would still lead to a shortfall on the 5CB of 167 MtCO₂e. Even more concerning is that there is a strong implication that a major option to meet this shortfall is not to strengthen policy, but to "carry-forward" over-achievement from previous carbon budgets. In 2014 the Committee on Climate Change has [argued strongly](#) against this "carry-forward" approach.

(from Table 5, p 145)	2028-2032 (MtCO ₂ e)
5th Carbon Budget	1725
Projected emissions, existing policies	1972
Projected emissions + new policies/proposals	1892
Shortfall	+167

The Government should be planning to overachieve, not underachieve on both 4th and 5th Carbon Budgets. Although the CCC has not yet recommended tightening the 4th and 5th Carbon Budgets, it has said that existing targets are not ambitious enough to meet the Paris Climate Agreement targets to keep warming "well below" 2 degrees, and to "pursue efforts" to keep warming to 1.5 degrees. The strategy mentions the CCC advice that UK contribution to Paris should "include measures to maintain flexibility to go further on UK targets". In this context, the lack of policies to meet even existing carbon budgets is more disappointing.

Specific chapters:

In specific sector chapters there is a strong narrative of the huge economic opportunities the low-carbon transition presents, but there are still significant policy shortfalls, or gaps in explanations of how these opportunities and their linked emissions reductions will be realised.

Business and Industry

Policies on "unlocking business energy efficiency" are not yet developed – the Government "will develop a package of measures" and "consult in 2018".

Alongside the CGS the Government has [published its long-awaited decarbonisation plans](#) for 7 of the 8 most energy-intensive industrial sectors; this is very welcome.

The Government sets out £162m of innovation funding to 2021 (p68), much of this earmarked for industrial CCS.

Homes and Buildings:

The CCC in its Fifth Carbon Budget recommends that emissions from homes and buildings will need to reduce by 20% from 89MtCO_{2e} per year in 2016, to 71.2 MtCO_{2e}. Crucially too the CCC says that the policies must prepare the way for zero carbon homes and buildings by 2050.

The Clean Growth Strategy splits homes away from commercial buildings. It estimates that emissions from homes will reduce by 19% by 2032 (down from 72Mt to 58 Mt by 2030). However it is not quite clear how this will be achieved, and is merely one indicative pathway.

The policy measures are listed on pp 77-79. The strategy "wants" to lift all fuel poor households to EPC C by 2030 (point 4) and there is a heavily caveated aspiration that as many homes as possible should be at that level by 2035, but there are not yet clear policies to achieve either.

ECO will be extended to upgrade 1 million homes (point 1), yet this appears to fall far short of the CCC recommendations on insulation (all practicable lofts by 2022, all practical cavity walls by 2030 and 2 million solid walls by 2030). The other policy suggestions in the CGS on the private rented sector, green mortgages and 'other levers' (point 5) and building standards may make up this shortfall, but are not yet formed and it is not clear what impact they might have.

On renewable and non-fossil forms of heating, there is little in the CGS. The CCC calls for 2.5 million heat pumps in homes by 2030. It is not clear if the RHI will be able to deliver this level of investment. Again the CGS mentions that more measures will be needed for the 2020s.

There is £184 million in funding for innovation in buildings etc.

Power:

Power is perhaps the most advanced sector in terms of decarbonisation. In the CGS the government estimates that its 2032 pathway will see emissions fall from 80Mt in 2017 to 16Mt in 2032 (weirdly this is higher with the new policies than the old ones – p. 147, presumably because they have increased projections for EVs or heat from electricity). By 2032 they estimate that 85% of electricity will come from 'clean power' although its “clean” definition includes nuclear power, despite its major intractable toxic waste issues. The fraction of “clean” power which might be nuclear is likely to be small - a reducing amount of residual nuclear, plus Hinkley if it gets built, plus any further plants which seems unlikely. The implication of only 15% remaining fossil fuels – which would be all gas, as coal is rightly being phased-out – is a huge drop: power is the sector with the fastest recent and future decarbonisation pathway.

The main policies set forth to achieve this are:

1. Coal phase out by 2025 reconfirmed.
2. Hinkley (but no green light for other nuclear).
3. £557 million for offshore wind and islands onshore wind. 10 GW of offshore targeted as a start. This is low as £557m could get a lot more if conditions are right, say 25 GWp (this could supply around 76TWh of renewable power).
4. Update on small scale generation including solar due later this year (2)
5. Total of 18 GW of interconnectors targeted by 2030, including what is currently built and under construction.
6. Solar and batteries now pay just 5% VAT
7. Ofgem to investigate how to reform market to encourage flexibility
8. £117 million for renewables research, £460 million for nuclear research, £265 million on smart grids and balancing etc.

Essentially these would appear to just about meet the demands of the CCC – which called for 80-100TWh of new clean energy, a CCS strategy (set out elsewhere in Clean Growth Strategy) and more flexibility. The Carbon Capture and Storage element may be the smallest part of the power strategy; CCS is increasingly focused on industrial sectors.

Bad bits – there is still little on onshore wind despite its low costs apart from a mention of island onshore wind and small wind turbines on farms. Light on support for solar or communities, which is very disappointing given falling costs and high public support. There will need to be a lot more than 10GW of offshore wind installed to make up the clean energy shortfall, although the door is left open to this.

Transport

The CCC calls for 44% reduction in emissions; the CGS only plans for a 29% reduction, and not sure how it gets there, there is a policy shortfall. The transport relies heavily on EVs growing rapidly, which they may well do, however there is very little on cutting vehicle kilometres.

The strongest element is the switch away from petrol/diesel vehicles – citing spending £1 billion on ULEVS, end to sales of petrol/diesel by 2040, and EV charging support.

The CGS reiterates the April 2017 [cycling and walking strategy](#), saying £1.2 billion "may" be invested from 2016-2021)

On "domestic" aviation and shipping – there is mention of a series of consultations, but so far these consultations have been [desperately weak on climate change](#). International aviation does not get mentioned in the transport section.

The technical annexes eg page 153 says that Heathrow expansion is compatible with Climate Change Act 2050 targets, but doesn't say how. It cites Airport Commission modelling, but this implies Heathrow expansion would be met with capacity constraint at other airports, however recent consultations imply growth everywhere. Even if the Airport Commission aviation sector emissions of 44MtCO_{2e} is met, that is higher than the CCC advice, which itself required greater cuts from other sectors. These other sectors are not yet expected to meet existing carbon budget targets.

Natural resources:

This section covers a very wide range of different issues – agriculture, farming, food, forestry, waste and resource use.

There are three main areas which are missing:

There is no acknowledgment that we are currently failing to meet voluntary targets set for reducing agricultural emissions and the urgent need to tackle livestock emissions which are a hotspot. In June this year, the CCC [warned](#) the Government that the agricultural sector is not on track to deliver agreed non-CO₂ emissions reduction of at least 3MtCO_{2e} in England (4.5 MtCO_{2e} in the UK) by 2022. We need a proper plan to get this back on track.

There is no mention of the need to change our diets – yet this will be critical in order to meet global emissions reductions targets. If meat and dairy consumption continues to rise at its current rate, greenhouse gases from food production will increase by 80% globally by 2050. According to [Chatham House](#), unless demand is curtailed, livestock sector emissions will increase to the point where dangerous climate change is unavoidable. And there are huge co-benefits for public health. But there is a complete lack of political will, instead there is a strong tendency for industry and governments to focus on improving the efficiency of production where emissions reduction potential is limited.

There is no mention of the need to ensure that action to cut GHG emissions must not result in our impacts being exported. Eg increasing productivity in the pork sector is likely to have led to an increase in the import of animal feed from abroad, including soy, which may have caused deforestation and other land clearance – further emissions and biodiversity loss, also impacts on communities. The UK must part globally in ensuring that UK consumption and production does not lead to further deforestation and land clearance, and associated social impacts, abroad.

The main recommendations:

“38. As we leave the EU, design a new system of future agricultural support to focus on delivering better environmental outcomes, including addressing climate change more directly”

This is welcome. For too long, the EU Common Agriculture Policy (CAP) has failed to adequately address the climate change, and wider environmental impacts of farming. Agricultural support should reward farmers for delivering public goods, and support production systems that bring environmental and animal welfare benefits, while dis-incentivising those that do not.

But tackling GHG emissions from agriculture must be done in the context of addressing broader environmental and animal welfare issues, so that action in one area (eg emissions reductions) does not cause detrimental impacts in other important areas (eg biodiversity). A flourishing food and farming system is entirely dependent on having a healthy environment – clean water, healthy soils, thriving wildlife. It needs GHG emissions to be controlled and the climate impacts, eg flooding to be prevented.

Further details of proposals for new post-Brexit farming policies can be found in the [WCL](#) and [Sustain](#) briefings.

“39. Establish a new network of forests in England including new woodland on farmland, and fund larger-scale woodland and forest creation, in support of our commitment to plant 11 million trees, and increase the amount of UK timber used in construction”

Specifically there should be a commitment to support the development of agroforestry. The main section (pg 105) just says “implement plans for farmers to plant more trees”. Agroforestry – the practice of incorporating trees into pasture and crop land - has huge benefits for flood prevention, soil carbon sequestration etc.

“40. Work towards our ambition for zero avoidable waste by 2050, maximising the value we extract from our resources, and minimising the negative environmental and carbon impacts associated with their extraction, use and disposal”

This is a good aim but the shorter term targets for food waste are not ambitious enough (20% reduction by 2025). Food waste should be halved by 2030 (as agreed by the European Parliament in January) and this target needs to be binding. European Council is trying to water

down this commitment; FOE is asking the Government to prevent this:

<https://act.foe.co.uk/act/defend-plans-halve-europes-food-waste>. Whatever happens in the EU, the UK can of course put in place its own ambitious targets.

We should also be ensuring that the use of safe food waste for animal feed is developed, for pigs and poultry to make most effective use of this resource.

“41. Publish a new Resources and Waste Strategy to make the UK a world leader in terms of competitiveness, resource productivity and resource efficiency”

This should be based on the concepts of the circular economy, incentivise the production of non-disposable materials, recycling and re-use and address the serious issue of plastic pollution, demands on coffee cups and also bottle deposit schemes.

“44. Innovation: Invest £99 million in innovative technology and research for agri-tech, land use, greenhouse gas removal technologies, waste and resource efficiency”

There is a desperate need for funding for innovation – but there is over-emphasis here on technology solutions. Innovation should include farmer-led solutions developed from the ground up. GM crops would be an expensive red herring – they have failed to deliver elsewhere in the world with more supportive regulatory regimes. see our policy [position](#).

We also need a UK land use strategy – because of the multiple and conflicting demands for limited land. See FOE [land use calculator](#) which starts to surface and discuss options and trade-offs.

Forests, soil and peatlands:

The strategy is vague on repairing soils and soil quality in general (which is degrading, eroding and washing away) and on action to protect, maintain and restore sea beds and the marine environment – both are leading natural ways (tools) to help tackle climate change.

Forests – new forests and tree planting are welcome but the targets are extremely modest, no mention is made of the need to protect and restore existing forests, and some of the aims are very vague, for example on page 105: *“Our indicative pathway could involve planting up to 130,000 hectares of new woodland and implement plans for farmers to plant more trees across England.”*

Too many of the UK’s remaining ancient woodlands are threatened by bad development, road schemes etc which work against low carbon growth. The lack of join up in the Clean Growth Strategy will need to be rectified in the much-delayed 25 Year Environment Plan, which the strategy refers to.

Peat lands - restoration of peatlands is much needed but the government is already off track with its own aims to phase out use of peat in gardens and in the horticultural trade

Public sector:

Shows no likely progress from now to 2025! (p115), despite the sector currently running a £2billion energy bill.

It's fine to mention the role of Local Economic Partnerships (LEPs) in energy and carbon however these bodies are also promoting roads and other developments harmful to nature and entrenching carbon intensive activity.

Governance:

The reinstatement of the cross-ministerial group to monitor and implement this strategy is very welcome.

It's welcome that the Government are taking comments on this strategy, but this is not a formal consultation, and but only committing to update in June 2021.

The reporting metrics don't include absolute emissions, but relative measures. Emissions per unit GDP are decent indicators, but the metrics that matter are absolute emissions in each sector, and in the economy overall.