C R E D S

Appendix 1: Working paper: Policies and Proposals in the Clean Growth Strategy

Database, sector overview and meta-analysis

July 2019

Stefanie Reiss and Tina Fawcett
Environmental Change Institute (ECI),
University of Oxford

Abstract

This paper presents a database, which has been created summarising the policies and proposals in the Clean Growth Strategy and their characteristics. A meta-analysis has been carried out, looking at different criteria within and across sectors, with a specific view on demand-side policies. The analysis showed a lack of specificity and targets across all sectors. In terms of policy mix, we found a clear focus on innovation funding. Demand side policies often concentrate on energy efficiency and appear to have a lower focus on innovation investment and a slightly higher focus on providing information or influencing regulations and markets, compared to the overall policy mix. The categorisation of policies as 'radical' is not straightforward but worth further consideration.

Abbreviations

CB	Carbon Budget
CBI	Confederation of British Industry
CCC	Committee on Climate Change
CCUS	Carbon capture usage and storage
CGS	Clean Growth Strategy
CREDS	Centre for Research into Energy Demand Solutions
GII	Government Innovation Funding
LEP	Local Enterprise Partnership
SME	Small and medium-sized enterprises
UKERC	UK Energy Research Centre

Appendix to Eyre, N and Killip, G. (eds). 2019. Shifting the focus: energy demand in a net-zero carbon UK. Centre for Research into Energy Demand Solutions. Oxford, UK.
ISBN: 978-1-913299-00-2

Contents

1. Introduction

The UK Government's Clean Growth Strategy (CGS), pursuant of the Climate Change Act 2008, was presented to Parliament in October 2017. The work presented in this paper is based on the amended version published in April 2018. The work presented here was carried out as part of the new UK Centre for Research into Energy Demand Solutions (CREDS), which aims to deliver further, faster and more flexible change in energy demand.

In this context, the aim was to identify policies in the CGS that could deliver the goals of the Climate Change Act and the subsequently defined Carbon Budgets, with a particular focus on the more radical and non-incremental approaches of demand-side policies. In order to address this, we have created a database of all the policies and proposals listed in the Clean Growth Strategy, categorised them according to different criteria and analysed their characteristics with a meta-analysis.

Database and analysis are provided in an Excel spreadsheet, which contains the worksheets listed below. The content of each worksheet and the methodologies used are explained in more detail in the next section.

Table 1: Worksheets in the database file

Worksheet name	Worksheet content
Introduction	Brief introduction summarising the methods and how to use the database.
1_PolicyDatabase	Database including all policies listed in the main body of the CGS, including categorisation and characteristics.
2_MetaAnalysis	Meta-analysis carried out based on the information collected in the database.
3_Investment	Overview of demand side and supply side funding as described in the CGS.
4_Other	Overview of other schemes and policies mentioned in the CGS.

2. Methodology

In this section we provide the details about the methodology used to set up the policy database and the subsequent analysis.

Worksheet 1_PolicyDatabase

Database set up

Our first goal was to create a simple database, listing all the individual policies and proposals[1] proposed in the CGS. Whilst this should have been a straightforward task, we found that the individual policies and proposals listed in the different chapters and their numbering are not consistent across the document. The following lists of policies and proposals are provided in the CGS document:

- **Executive Summary:** 50 key policies and proposals are listed in the Executive Summary. These are numbered consecutively, but many of the numbered items contain various policies as sub-aspects. Policies relating to all sectors are included, and also policies related to 'Accelerating Clean Growth' and 'Government Leadership in Driving Clean Growth'.
- **Chapter 4: Sectors:** A list of policies and proposals is provided in Chapter 4, which is more extensive with respect to number of policies and level of detail provided, compared to the list provided in the Executive Summary. Policies and proposals are numbered per sector, Government Innovation Investment is listed subsequently for each sector, but not numbered.
- **Annex A: Decision Pathways:** Timeline of the policies and proposals, including future policy development such as publications, key decisions, reviews and consultations. Provided per sector, not numbered. Programmes which cut across several sectors are not included.
- **Annex B:** Actions and Milestones that the Government is committing to in the CGS, and related publications. Provided per sector, not numbered.

1 Note that the terminology 'policies and proposals' is used throughout the CGS.

Moreover, some policies and schemes are also mentioned in other Chapters, mainly Chapter 3: Our Clean Growth Strategy. Since Chapter 4 contains the most exhaustive list of policies, we opted to use this as the main source for the database and supplemented these by additional details given in Annex A and Annex B.

Many of the policies and proposals introduced in Chapter 4 include several different aspects in one numbered item. In such cases, we have broken these down into separate entries in the database to allow for categorisation. Moreover, we have also included the policies and proposals listed under 'Government Innovation Funding' (GII) for each sector, which contain mainly (but not exclusively) details about government funding/ investment. Some of the light green boxes in Chapter 4 also contain specific policies (e.g. related to CCUS[2], fluorinated gases, local leadership), which we have also included in the database. An overview of the number of policies listed per sector is provided in Table 2.

Table 2: Number of policies listed in CGS and breakdown for database

Sector	In Chapter 4 (excluding GII)	In Executive Summary	In Annex B	Database breakdown
Industry and Business	17	9	17	**29**
Improving Homes	17	11	18	**40**
Low Carbon Transport	26	10	14	**50**
Clean, Smart and Flexible Power	16	6	11	**27**
Natural Resources	22	7	19	**46**
Public Sector	4	6	5	**14**
Total	**102**	**49**	**84**	206

Database structure

The database is one of the main outputs of the work described in this paper. It contains one table per sector (sectors defined according to Chapter 4 of the CGS). In the following we provide details about the different columns in each table.

Each policy or proposal is listed as an individual database entry by page number (column A), number of the policy or proposal, or as GII, respectively (column B) and sector area (column C). Column D contains the actual policy or proposal. All of these are used as defined in Chapter 4 of the CGS.

Subsequently, we have applied some top-level judgement for further characterisation. We have described (column E) and categorised (column F) the policies and proposals by type of policy. The categories used in column F are:

2 Note that for CCS/CCUS the policies listed on page 69 are not listed as individual policies but summarised as one entry, which may slightly skew the numbers.

- Investment
- Information
- Partnership
- Regulatory
- Voluntary
- Market
- Fiscal
- Unclear ('?')
- Various/other

Moreover, we have collected the following specific details about each database entry based on Chapter 4, Annex A and Annex B:

- Column G: Timescales
- Column H: Investment
- Column I: Lead department
- Column J: Specific targets or outcomes
- Column K: Obligations on anyone

Moreover, a judgement has been made whether the policies or proposals

- Column L: Focus on the demand side of the energy system (see note below regarding transport sector)
- Column M: Overlap with other policies listed in Chapter 4

And finally any further comments have been collected in column N.

Note: For transport policies the following distinction on demand side policies (column L) has been adopted, following advice from Prof Jilian Anable, CREDS Transport & Mobility Theme Leader:

1. Demand side policies: Focus on travel demand, i.e. the utilisation of vehicles (including mode switch, travel demand, vehicle passenger/load occupancy)
2. Vehicle demand policies: influencing the number of cars and the types of cars that people buy
3. Vehicle efficiency policies: regulating/target setting for vehicle efficiency and CO2 emissions, including fuel switching and retrofitting of low emission technologies

A summary of the database columns and whether they are based on data in the CGS or our judgement is given in Table 3.

Table 3: Database columns		
Column	**Content**	**Based on**
A	Page	Chapter 4
B	Number	Chapter 4
C	Area	Chapter 4
D	Policy / proposal	Chapter 4
E	Type of policy / proposal	Judgement
F	Category	Judgement
G	Timescales	Chapter 4, Annex A&B
H	Investment	Chapter 4, Annex B
I	Lead department	Annex B
J	Spec target / outcome	Chapter 4&5, Annex D
K	Obligations	Chapter 4
L	Energy demand focus	Judgement
M	Overlap	Chapter 4
N	Comments	Judgement
O-X	Meta-analysis data	Data columns F-L

Worksheet 2_Meta-analysis

Data sources

As indicated in Table 3, we have carried out a meta-analysis based on the data collected in columns F - L. In columns O – U we have indicated for each policy or proposal whether or not the following applies by using the numbers 1 (Yes) or 0 (No):

Table 4: Database columns for meta-analysis		
Column	**Content**	**Based on**
O	Timescales allocated?	Column G
P	Investment allocated?	Column H
Q	Government department allocated?	Column I
R	Specific targets or outcomes defined?	Column J
S	Obligations on anyone?	Column K
T	Focus on the demand side?	Column L
U	Focus on the supply side?	Column L
V	Category of demand side policies	Columns L and F
W	Investment allocated to demand side policies	Columns L and H
X	Investment allocated to supply side policies	Columns L and H

Columns V and W are set up using the following rules: If the policy or proposal is categorised to have a demand-side focus (column L = "Y"), the category and allocated funding are displayed again. Column X on the other hand displays the funding for policies and proposals with supply-side focus, i.e. column L = "N".

The meta-analysis data is mainly used for worksheet 2_MetaAnalysis, the details on the investment are furthermore picked up in worksheet 3_Investment. Further details are provided in the subsections below.

Sector overview

Much of the information provided is spread across the CGS document, without links or reference to each other. Therefore, we decided to collect the numbers provided in the CGS in one place to create an overview of the contributions per sector and to highlight discrepancies and inconsistencies across the document. This is pulled together in worksheet 2_MetaAnalysis and includes the following aspects:

Table 5: Meta-analysis columns

Column	Content	Based on	Consistency across CGS
A	**Sector**	Chapter 4	Mainly yes. In Executive Summary 'Public Sector' is split into 'Leading the Public Sector' and 'Government Leadership in Driving Clean Growth'.
B	**% of UK emissions**	Executive Summary	Consistent with numbers in Chapter 4
C	**Government investment**	Chapter 4: total 'Government Innovation Investment' per sector	Consistent with Table 3 on p52 (Government investments in clean growth technology 2015-2021) if 'Innovation in Smart Systems' is included into 'Innovation in the Power Sector'.
D	**2032 emission reduction**	Chapter 3, p.54	Small deviations from numbers in Chapter 4: According to p54 emissions from business and the public sector should be falling by 30%, whereas according to Chapter 4 emissions from public sector should be falling by 50% (p115). According to p54 emissions from land use and agriculture should be falling by 26%, according to Chapter 4 they should be falling by almost two fifth (i.e. less than 20%, see p103).
E	**2032 target**	Technical Annex, p148, Table 6	Consistent with numbers in Chapter 4.

The number of policies and their breakdown into individual items has been discussed above. The numbers are provided in columns F – I of worksheet 2_MetaAnalysis.

Columns J - AI contain the summary data of the meta-analysis, based on the database columns O – X. This includes, per sector

- Columns J – N: Count of policies or proposals in database which have allocated timescales, funding, Government department, specific targets or impose obligations on anyone.

- Columns O – Q: Count of policies or proposals in database which have a demand-focus, supply focus or cannot clearly be categorised into one or the other, e.g. because they address wider, or network issues. See note above for transport sector.
- Columns R – Z: Policy mix, based on count of policies or proposals in database which have been categorised according to the categories described above.
- Columns AA – AI: Policy mix of demand-side policies, based on count of policies or proposals in database which have been judged as demand-side policies and are categorised as described above.

Word count

Finally, we have carried out a word count. This is however not an absolute count of words, but rather a count of how many policies contain the specific words of interest (based on Chapter 4 and Annex B). The numbers are provided in columns AJ – AQ of the worksheet and results are discussed in the Findings section.

Worksheet 3_Investment

Worksheet 3_Investment contains an overview of the funding and investment amounts allocated to policies and proposals identified as demand-side policies and supply-side policies respectively, based on the distinction made in the database, column L.

However, investment amounts are not necessarily comparable, as they are spent over different timescales, and some of the amounts mentioned include private funding, e.g. through the ECO scheme. Therefore, we have not analysed this any further, but simply kept the worksheet in for information.

Worksheet 4_Other

Worksheet 4_Other includes two more tables with other schemes and policies mentioned in the CGS. These are set up in a similar way to the tables in worksheet 1_ PolicyDatabase:

- The first table summarises the policies and proposals mentioned in Chapter 3: Our Clean Growth Strategy. Note that most of these are listed again in Chapter 4, which has been used as the main source for the database.
- The second table includes other schemes mentioned in Chapter 4, such as European Policies and other domestic policies, which are relevant to the policies and proposals of the Clean Growth Strategy, but they are not new policies or proposals themselves.

None of these lists claims to be exhaustive, and again, we have not analysed the data from these tables any further, but included them for information purposes.

3. Findings

In this section we present initial findings derived from our analysis of the CGS with regard to the database, in particular the sector and policy overview based on the meta-analysis and a more detailed assessment of the demand side policies.

Sector overview

A broad overview of the contributions of each sector is provided in Table 6. This includes the current share of emissions in % for each sector, followed by the allocated Government funding and the 2032 emission targets, both in relative, as well as absolute numbers.

Table 6: Overview sector contribution, allocated funding and emission targets

Sector	% of UK emissions	Government investment	2032 emission reduction	2032 target
Industry and Business	25%	£162 million	-30%	83 Mt
Improving Homes	13%	£184 million	-19%	58 Mt
Low Carbon Transport	24%	£841 million	-29%	83 Mt
Clean, Smart and Flexible Power	21%	£903 million	-80%	16 Mt
Natural Resources	15%	£99 million	-26%	41 Mt
Public Sector	2%		-50%	4 Mt
Total	**100%**	**£2.189 billion**		**285Mt**

The Government investment for all sectors together is £2.189 billion, which, together with 'Cross-sector Clean Tech Innovation investment' of £387 million adds up to the total of £2.576 billion (p52), which is the much advertised number of 'more than £2.5 billion' investment in clean growth.

The biggest share of funding (35%) is allocated to the power sector, more than half of which (£460 million) is dedicated for further development of nuclear capacity. Another big contribution of almost 33% goes into the transport sector, which is the sector with the smallest emission reduction (only 2% since 1990). A large proportion of this investment goes into further developing ULEVs, network and infrastructure and accelerating their uptake. Moreover, change in transport mode is encouraged through investment in walking and cycling infrastructure and shifting more freight from road to rail.

2032 emission targets are provided per sector, with a total of 285Mt in 2032. These are phrased in deliberately weak language, as "a possible pathway", which "could involve […]" (p54). However, even with these ambitious reduction targets, a shortfall against the 4th and 5th CB is expected (see p40-41). The implications and risks of this have already been discussed at length by others, for example by the Committee on Climate Change (CCC) in their independent assessment of the CGS. In particular, they stressed that even if all policies and proposals deliver in full, a significant gap remains for both the 4th and 5th CB, which must be closed urgently. Moreover, they strongly advise to address the risk of under-delivery and warn to rely on using flexibilities for achieving the legal requirements.

Policies and proposals: lacking detail and specificity

The CGS's lack of specificity has already been pointed out by others (e.g. CCC, UKERC, CBI). In the following we present our own analysis on this issue.

The CGS contains many policies and proposals - over 200 by our count, see Table 2. However, many do not have timescales, funding or targets attached (Figure 1 and Figure 2). Only two thirds of the policies overall have timescales allocated, just under a quarter have funding allocated and less than a third have a Government department allocated that is responsible for this specific policy or proposal.

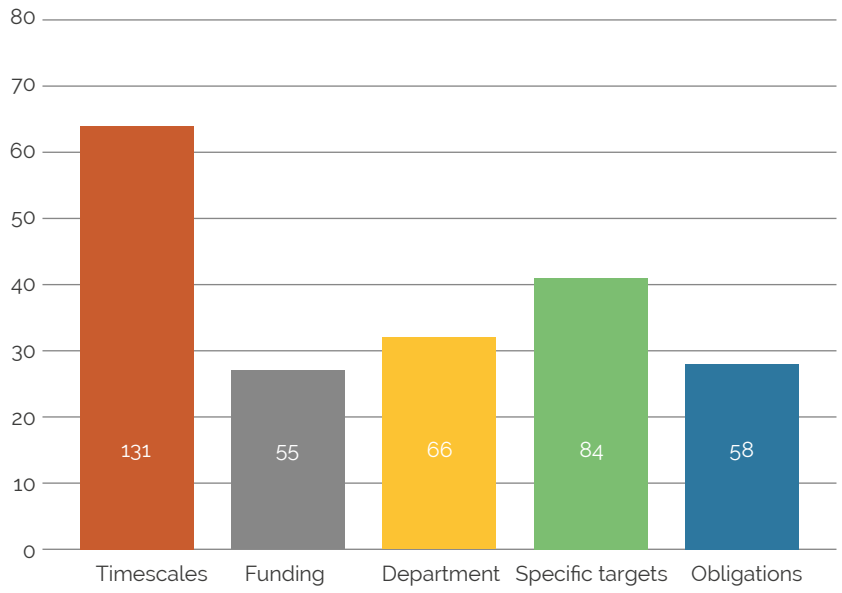


Figure 1: Characterisation of policies in Chapter 4 and Annex B

Specific targets and obligations are rare, too. Just over 41% of the policies or proposals have targets allocated. The interpretation of 'specific targets' here is generous, and includes policies or proposals where the targets are vague or relative, using language such as 'improve' or 'reduce', without actual numbers or milestones. There are very few policies that actually pose obligations on anyone, and potential future obligations on, say, landlords or industry, are rarely specified.

Figure 2 takes a closer look at how the specificity varies between the policies and proposals in the different sectors. We observed that there is not much difference with regard to timescales, but other factors vary more. For example, Industry and Business and the Public Sector have proportionally fewer policies or proposals with funding allocated, which also corresponds with the fact that these are the two sectors with the least total amount of sector funding (see Table 6). Presumably this can be explained by more private sector funding available in the industrial sector and other measures available in the Public sector.

The Transport sector stands out with notably less specificity in terms of targets and obligations, and also fewer policies and proposals that have a Government department allocated, stressing the point that there is still much to do in this sector. This is particularly important in view of only small progress in emission reductions so far. The Public sector also has remarkably few policies with specific targets or obligations, but at least some responsibilities have been allocated by identifying the responsible Government department. Natural resources on the other hand shows the largest number of specific targets, which are mainly in the areas of waste management and tree planting, where targets appear somewhat more defined than in most other economic areas.

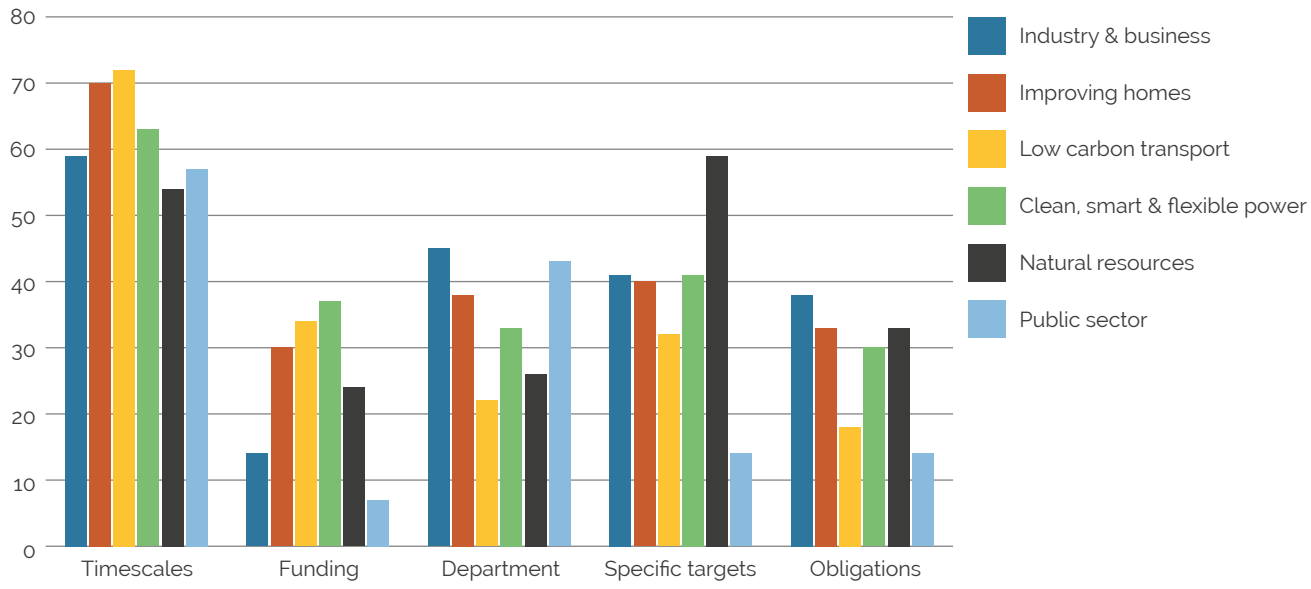


Figure 2: Characterisation of policies in Chapter 4 and Annex B, by sector

Word count: little appearance of selected key words

The results of the word count are presented in Table 7. Selected words only appeared surprisingly few times. For example, SME was only mentioned in two policy proposals and only one policy proposal mentioned regional action, despite the focus on driving regional growth highlighted in Chapter 1 (p26). LEPs and local action appeared in a couple of policy proposals, most notably in the Transport sector. The distinction between voluntary or mandatory targets is not often provided, which fits with the previously mentioned lack of detail and specificity. Disruptive technologies are not mentioned frequently either, and sustainability, whilst mentioned more frequently, appears to be limited to some of the sectors.

Table 7: Results word count

	SME	LEP	local	region*	disrupt*	voluntary	mandatory	sustainab*
Industry and Business	1				1	1	1	
Improving Homes								
Low Carbon Transport	1		4				1	2
Clean, Smart and Flexible Power			1					1
Natural Resources		1	1	1	1			4
Public Sector		1	3			1	2	1
Total	**2**	**2**	**9**	**1**	**2**	**2**	**4**	**8**

Sector-wide targets: few and not well linked with policies

Apart from the 2032 emission targets discussed above, only very few specific sector wide targets are provided, and these are spread across the document. Some are included in Chapter 5: Next Steps, which is a remarkably short chapter with only two pages. It includes a table with diagrams on three economy-wide and a couple of sector-level metrics, providing data points for 1990 baseline, 2015 progress and 2032 targets. Only 2 metrics are given per sector, and no detail is provided on how these link with specific policies. A reference is given to Annex D (Changes that illustrate how our pathway could be delivered), which claims to summarise key changes in each sector that could lead to emission reductions set out in 2032 pathway. However, it only provides exactly the same whole-economy and sector targets as in Chapter 5, plus three more targets (two for Transport and one for the Natural Resources sector). Where we could identify a link with specific policies or proposal, we have included these targets in the database.

Not only are there only very few specific sector targets, but of the few targets provided, most sectors include a target on emissions per energy used or emissions per activity. Strictly speaking, some of these should rather be attributed to the power sector as they mainly depend on the generation mix and associated emission intensity. (For example, 'emissions intensity of industrial energy use', 'emissions intensity of non-industrial and public energy use', 'emissions intensity of home energy use').

Finally, some more specific targets are mentioned in Chapter 4, mainly in Section 'Ambition' for each sector. However, many of these are neither picked up in the specific policies, nor later in the sector-wide targets summarised in Chapter 5 and Annex D. Examples include:

- 6-9 million properties insulated (p75),
- All 2.5 million fuel poor homes in England at EPC C or better by 2030 (p75),
- ULEV uptake: 30-70% of new car sales by 2030 (p86),
- New HGVs 15% more efficient by 2030 (p86),
- Near doubling of sustainable bioenergy (p86).

Policy mix: focus on innovation investment

The Government's take on how to meet the emission targets is summarised at the beginning of Chapter 3: Our Clean Growth Strategy. The Government stresses the need for "low car carbon technologies, processes and systems that are as cheap as possible". Therefore, the aim is to "create the best possible environment for the private sector to innovate and invest by […] design[ing] competitive markets and smart regulations to support entrepreneurs and investors […]" and encouraging innovation by investing more than £2.5 billion from 2015-2021. In addition, the focus is on "policies that deliver social, environmental and economic benefits" (p47). This approach is reiterated later in the chapter, stressing the "power of Government to support innovation in a low carbon economy, using all the tools available […], including market design, taxation and regulation, as well as investment in our education system, our science base and innovative companies" (p49).

In light of this, it is not surprising that the overall policy mix has a strong focus on innovation investment, as shown in Figure 3 and Figure 4. The majority of proposals aim to address clean growth by investing in technological breakthroughs. Less than a quarter of policies intend to apply regulatory, market or fiscal measures and about a fifth of policies or proposals are not even specified (unclear, or various / other). Only two of the policies and proposals are classified as voluntary.

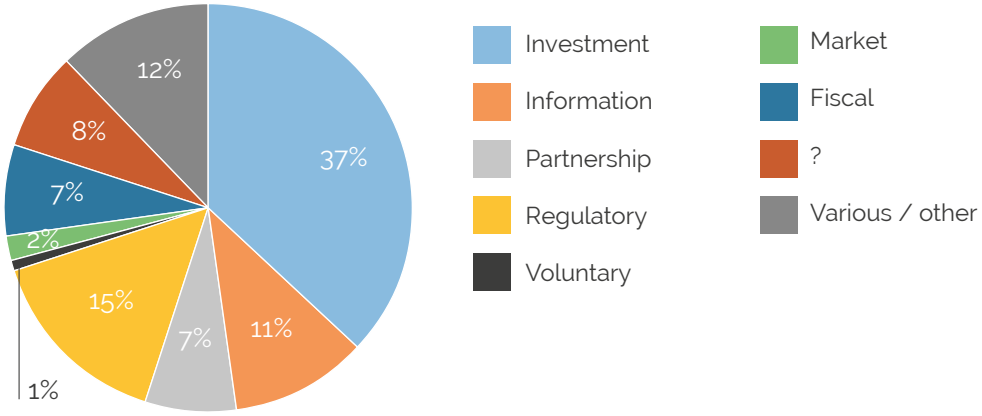


Figure 3: Policy mix proposed in the CGS

Figure 4 takes a closer look at the policy mix by sector. Some variations can be observed, but overall we found the policy mix to be relatively equal across sectors. Interestingly, the Natural Resources sector has the least amount of regulations, but comparably more fiscal policies and proposals, which are mainly about creating incentives and new business models both for better waste and resource management as well as to encourage further tree planting. The industry and business sector also has a comparably higher share of fiscal policies, mainly to support energy efficiency.

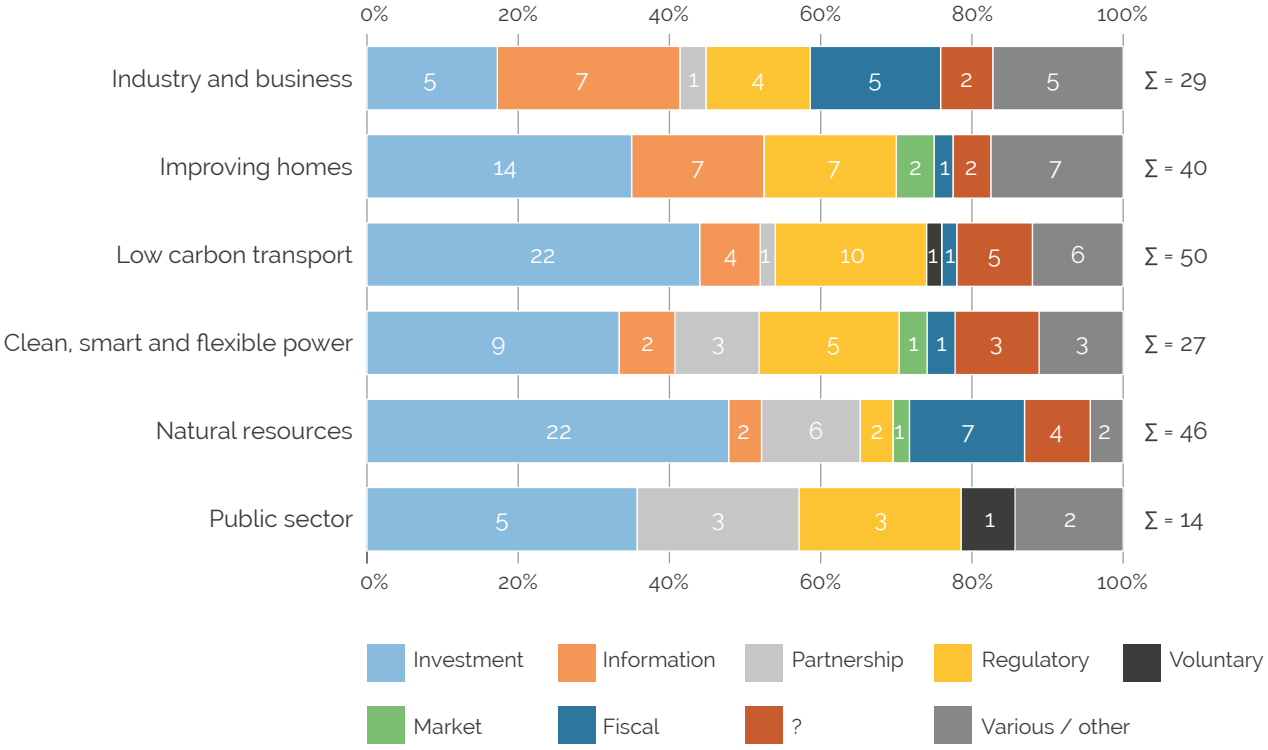


Figure 4: Policy mix proposed in the CGS, by sector

Demand versus supply: different focus across the sectors

As described above, we have categorised the policies in the database as demand side or supply side polices where possible. (Note the slightly different distinction in the transport sector, please see details in Methodology section). Overall, one quarter of policies and proposals could be allocated to the demand side of the energy system (Figure 5). An overview of demand side policies in the different sectors is provided in Table 8 below.

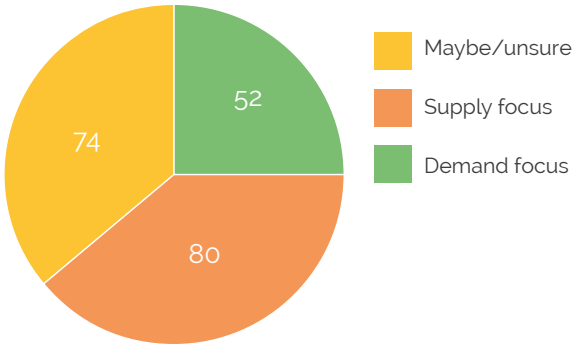
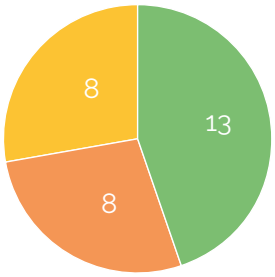
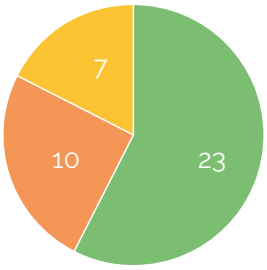
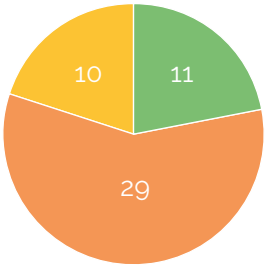
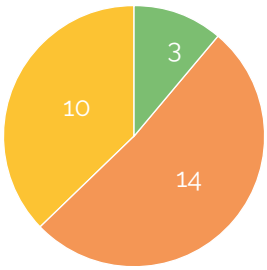
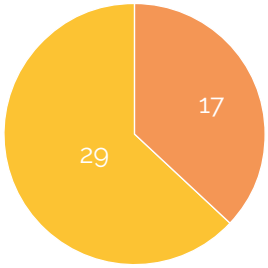
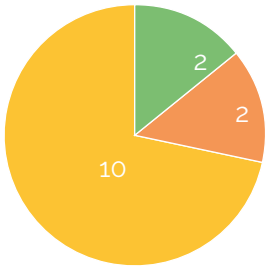


Figure 5: Share of demand side policies in the CGS

Table 8: Overview of demand focus across sectors

Sector	Overview	Demand focus
Industry and Business	29 policies/proposals 13 with demand focus = 48% demand focus	
Improving Homes	40 policies/proposals 23 with demand focus = 58% demand focus	
Low Carbon Transport	50 policies/proposals 11 with demand focus = 22% demand focus	

Sector	Overview	Demand focus
Clean, Smart and Flexible Power	27 policies/proposals 3 with demand focus = 11% demand focus	
Natural Resources	46 policies/proposals 0 with demand focus = 0% demand focus	
Public Sector	14 policies/proposals 2 with demand focus = 14% demand focus	

In absolute terms, most of the demand side policies are in the sector Improving Homes, followed by Industry and Business and then Transport. According to our categorisation, 47 of the 52 demand side orientated policies (90%) are in either of these three sectors. Moreover, the same order applies when looking at the relative comparison, i.e. the sector Improving Homes has the highest proportion (58%) of demand side policies compared to overall policies, followed by Industry and Business (45%) and the Transport sector (22%). We found significantly fewer demand side policies are located in the other three sectors, which is not very surprising given the difference in activities and energy use across the sectors.

Many of the demand side policies concentrate on improving the energy efficiency of buildings, such as improved building fabrics in homes and business buildings, for example through tighter standards and increased requirements for rented buildings. Most of the demand side policies in the Industry and Business sector are focussed on energy efficiency. The demand side policies in the Transport sector on the other hand mainly look at travel demand (including mode switch and efficiency gains in the use of the vehicles), as this is how demand side policies in this sector has been defined, see note above.

Demand side policies: less investment, more information

Subsequently, we had a look at the policy mix for demand side policies specifically (see Figure 6). Here we found much more variation compared to the overall policy mix, as between the sectors. The first aspect that stands out in our analysis is that there are significantly fewer policies categorised as innovation investment (25% compared to 37% overall), and a much higher focus on providing information (23% compared to 11% overall).

In other words, more than half of the policies that have been categorised as information, sit on the demand side (12 of 22 overall), most of which are related to energy efficiency. Many of these are either located in the industrial sector and related to information gathering such as reviews and consultations for the purpose of developing further schemes and policies, or they are related to more directly providing occupants with information about their home energy use. The proportion of regulatory and market-related policies and proposals is slightly higher, too (17% and 6%, compared to 11% and 2% overall) and no partnerships or voluntary policies are found on the demand side.

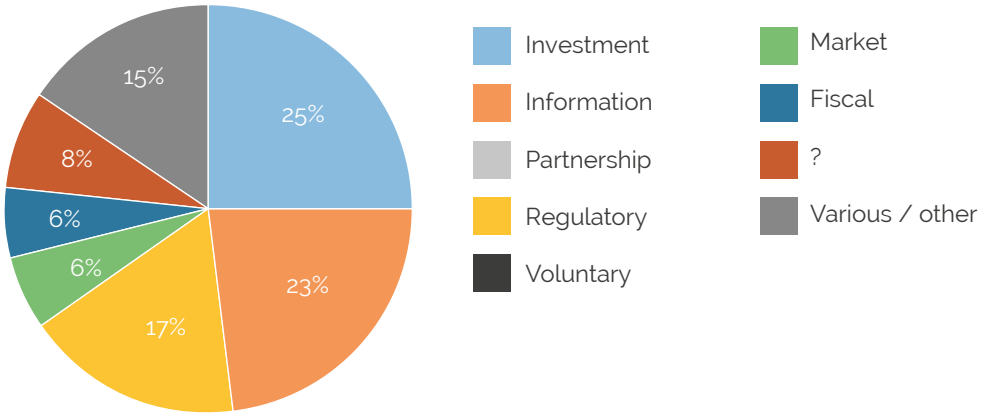


Figure 6: Policy mix proposed in the CGS for demand side policies

Radical policies: a definition worth discussing

CREDS is interested in radical and non-incremental approaches to demand-side policies. We tried to include this characteristic in the database in order to understand to what extent the current policy mix in the CGS could be described as radical. We defined radical as the opposite to incremental change, but recognise that it depends very much on the social and institutional context and the perspective of the actors. Moreover, we found that it is difficult to characterise policies in isolation, but that they need to be judged considering the overall policy package. In view of this ambiguity, we decided not to include the categorisation whether policies were radical or not into the database. The process did however highlight a gap in this area and it would be worth looking at how radical policies or a radical policy mix could be defined, what it might look like and how it can help in delivering further, faster and more flexible change in energy demand.

4. Summary and conclusions

In order to characterise the policies and proposals in the CGS, we have set up a database and carried out a meta-analysis looking at the overall policy landscape across all sectors. This has enabled us to create a good sector overview, and also delivered some more insights with regard to the policy mix suggested in the CGS. The following key findings emerged:

1. Even though a large number (>200) of policies and proposals are included in the CGS, many of these lack detail and specificity, with regard to timescales, funding, responsibility and specific targets or obligations.
2. Some (few) sector wide targets are provided, however these are not linked to specific policies and therefore it may be questionable whether these targets can be achieved.
3. The policy mix proposed is very much focused on innovation, with over 37% of the policies and proposals in the CGS categorised as investment. This reflects the Government's approach to meeting emission targets through technological breakthrough.
4. The focus on demand side policies varies across sectors, with over 90% of the demand side policies located in the sectors Improving Homes, Industry and Business and Transport.
5. Demand side policies appear to have a lower focus on innovation investment and a slightly higher focus on providing information or influencing regulations and markets, compared to the overall policy mix.
6. Characterising policies as radical or not is not straightforward, but could be an area worth exploring further.

Based on these findings, we join the CCC's urgent call for more detail and targeted action. We reiterate the important role of demand side policies and appreciate that we need to better understand and support policy making that goes further, faster and more flexibly.