Climate Targets Motion Briefing Paper

Rationale

The Green Party of England and Wales has consistently set very ambitious targets for domestic emissions reduction but has been less clear about imported emissions. Since 2017 the production / territorial target has been net zero emissions by 2030. However the party has not adopted policies that would achieve that target because:

- Although our policies would reduce UK emissions by more than those of other UK political parties it has proved impossible to define policies which would reduce emissions to zero by 2030 and
- · Some policies that we know we need are economically or politically unworkable.

And, of course, each passing year in which the UK does not follow the necessary policies makes the problem harder.

We believe that it would be irresponsible, and electorally risky, to go into the next General Election with a target that we know we cannot meet. And to avoid repeating this every few years we need more than a new target, we need a new approach.

So we propose:

- 1. To emphasise the need to reduce imported as well as domestic emissions.
- 2. To remove the Zero Carbon 2030 target for domestic emissions from the Policies for a Sustainable Society.
- 3. To recognise the large size of the UK's historic responsibility for the climate emergency and corresponding duty to reduce its emissions fast.
- 4. To continue to improve our planning and from this to generate ACHIEVABLE interim plans and targets, usually related to the term of a parliament.
- 5. To put these into the Record of Policy Statements at least often enough to support the creation of national and regional election manifestos.

We believe that this approach will be at once more honest, more practical and more useful than the current one.

Background

In 2008, the UK passed the Climate Change Act [2], that called for an 80% cut in greenhouse (GHG) gases produced in the UK by 2050 relative to a 1990 baseline.

This led to the Climate Change Committee (CCC) [3], set up by this act, publishing a number of 5 year carbon budget targets. These budgets become law. The CCC suggests policies to achieve the budgets. The first carbon budget (2008 to 2012) and the second budget (2013 to 2017) were both achieved. The third carbon budget (2018 to 2022) is also set to be achieved. They were achieved largely due to the removal of coal from electricity production and significant industrial production being offshored [17]. But progress in other sectors has been patchy.

From 2008 to 2017, the Green Party policy, by contrast, called for a 90% cut in greenhouse gases produced in the UK by 2030 relative to a 1990 baseline.

However the 2010 [4] and 2015 [5] Green Party General Election manifestos did not show whether the policies contained were consistent with the overall Green Party climate policy target of 90% emissions reduction by 2030.

In 2015 the Paris Agreement [6] was agreed which contained the target to limit global warming to 1.5 C (Centigrade). Even with the published science at the time, it was clear that the UK government target was inadequate with any degree of equity and the Green Party target was also inadequate from a scientific and green philosophy point of view.

In 2016, the first version of the Green Party Energy Policy Model, [7], was produced to determine what level of emissions the Green Party policies could achieve in 2030. It was clear from this work that the Green Party policies could not achieve the 90% reduction in emissions by 2030, but could meet 80% reduction by 2050.

In 2017, the Green Party policy [8] was changed to call for net zero greenhouse gases to be produced in the UK by 2030. This reflected the strong scientific and moral case for this to be the UK's contribution towards supporting a 1.5C global target.

However the Energy Policy Model (EPM) continued to show a large policy gap. The Green Party policies did not achieve net zero by 2030.

Leading on from the IPCC (Intergovernmental Panel on Climate Change) Special Report on 1.5C in 2017, [9], Extinction Rebellion called for UK emissions to be net zero by 2025, [10], there were school strikes and many council motions and UK parliamentary motions declared climate emergencies. Many of these included targets to be net zero by 2030.

In 2019, the UK amended the Climate Change Act, [2], that called for a 100% cut in net greenhouse gases produced in the UK by 2050.

In response to all of this the Green Party Spring conference in 2019, [11], called on the CEPWG (Climate Emergency Policy Working Group) to provide a gap analysis and improved policies to remove the policy gap. The CEPWG reported to Autumn 2019 and subsequent conferences that there continued to be a policy gap between the policy target and what the policies would deliver.

In 2019 the Green Party election manifesto, [12], proposed a Green New Deal to get the UK on track to reducing climate emissions to net zero by 2030. But unfortunately the policies presented in the manifesto did not achieve the stated net zero policy target.

The CEPWG has continued to address the climate policy gap to achieve net zero in 2030, as requested by Spring 2019 conference. But as there has been insufficient UK action in the mean-time, and there are now fewer years to 2030, it becomes more and more challenging each day as the gap widens and Green Party policy is not becoming more ambitious to close this gap. At the same time, any idea that there is really any meaningful amount of CO2 that can be emitted into the atmosphere and be sure of keeping below 1.5C warming has now gone.

So a new approach to policy is required.

The gap between targets and policies is widespread amongst political parties and governments across the world. What we need is an approach focusing on policies that will clearly reduce emissions and robust modelling that shows how much these policies collectively will achieve in terms of emissions reductions, rather than focussing on vacuous targets for which there are no matching policies.

Proposed Changes to Policies for a Sustainable Society (PSS)

The latest version of the motion is at [1]. This section contains commentary and explanation for each policy statement change.

CC013 (Global). The proposed changes are just tidying up the wording and moving NDCs (Nationally determined Contributions) to CC014.

CC014 (Paris Agreement). This has received wording about NDCs from CC013 and made it clear existing NDCs need to be strengthened. In point 6, it clarifies that not all SDGs (Sustainable Development Goals) are compatible with Green party policy. In particular, economic growth as a goal in its own right (part of SDG point 6) is not a goal of Green Party policy.

CC015 (Targets). This is the policy that currently contains the policy target of net zero by 2030. As per the background section of this document, as this date approaches it becomes increasingly necessary to get to zero emissions sooner, but increasingly difficult to achieve due to fewer years to go. An unrealistic target does not help if the policy gap gets increasingly wide and it is impractical to update policy every year or even more frequently.. So the explicit zero target is being removed from this policy. It will be replaced by a RoPS climate target statement that explains what Green party policies can achieve.

A challenge with having a specific target year for zero emissions is that it can be years off – as in the government's case net zero is in 2050. Depending on the political situation it may be better to express the target in terms of what can be achieved in the next parliament or even what can be achieved in the next year.

The current policy wording uses "net zero". The word "net" has come in for criticism as it appears to leave room for positive emissions from some sectors, areas or even individuals and then relying on another sector to remove the emissions or compensate in some other way.

In a RoPS climate target statement it is easier to express a more nuanced target over a more meaningful period of years. The current style of the Climate Emergency policy chapter is for short policy principle statements. A RoPS climate target can be used for a more detailed statement.

CC015 continues to mention equity. We link equity of the UK's share of emissions to the Greenhouse Development Rights (GDR) method of determining a country's contributions to overall global action. This method gives a much greater responsibility to the UK to cut emissions faster. Greenhouse Development Rights are explained further in [18].

In 2019 the Climate Change Committee (CCC) wrote a report that established their view on the UK's contribution to stopping global warming [19]. To do this, they determined the main variables in assessing this as the temperature target, the probability of achieving it and the method for determining a country's fair share. The CCC used 5 methods to determine the fair share (see in particular [19] Figure 3.9):

- Constant emissions ratio
- Greenhouse Development Rights (GDR)
- Capability
- Equal cumulative per capita
- Equal per capita

The only method of these 5 that can be considered "fair" with Green Party values is GDR. Other methods are looking for the UK to gain competitive advantage by emitting more than their fair share and / or not taking historical emissions into account and in some cases using the fact that we have emitted a lot in the past to justify continued higher emissions in the future. Unsurprisingly the CCC found that the UK using GDR "would need to reach net-zero GHG emissions considerably before 2050". Also unsurprisingly the CCC then chose a less "fair" method to justify net zero by 2050 being a sufficient UK contribution.

The CCC calculated the fair share based on a 50% chance of achieving 1.5C. From a moral stance, it is not justifiable to have a 50% chance of not achieving the objective. Morally we

would propose that we should be "very likely" to achieve 1.5C is used. In the formal language of IPCC, "very likely" is >90% chance of meeting 1.5C.

This combination of temperature target (1.5C), probability (>90%) and fair share (GDR) means the UK has no carbon budget left. So instead we must focus on the policies that will deliver the most GHG reduction as soon as we can.

CC016 (Target statements) This is a new policy in PSS to allow the specific policy statements for UK climate action to be made by other means. In the first instance the specific policy target currently in CC015 is to be replaced by a climate target statement in Records of Policy Statements. We may subsequently wish to change the climate target in a future General Election manifesto. Policy Development Committee can use their powers to remove the RoPS climate policy target with a statement in a GPRC approved manifesto.

FA101 (Farming climate target) 8th bullet This policy includes a reference to CC015 and zero emissions by 2030. As we are proposing to change CC015, this policy has been changed for consistency. This does not remove the need for large reductions in farm related greenhouse gas emissions.

FA301 (Climate Change) 1st and 2nd bullets As with FA301, these bullets reference zero by 2030 and net zero by 2030. As we are proposing to change the CC015 zero by 2030 policy target, these need to be changed for consistency.

Proposed Climate Target Records of Policy Statements (RoPS)

As we are proposing not to have an explicit climate target in the PSS, we are proposing to replace it with an alternative statement in the Records of Policy Statements in the first instance. What is placed in this and future versions of such RoPS statements may include when the UK is to reach zero emissions or other such reductions over periods of time given the policies of the Green Party and the current emissions at the time. This will also be set in the context of any global advice from Conference of Parties (COP), UNFCCC (United Nations Framework Convention on Climate Change) and IPCC.

This will allow the policy target to be changed more easily which may be required under a number of circumstances:

- changes in the science and predictions. This could be for the better but is often for the worse as the science of the impacts becomes more certain
- further increases of GHG levels in the atmosphere due to insufficient action
- technological advances that allow more or less ambition within the constraints of the UK and world economies
- the amount of behavioural / social change that it is practical for the Green Party to propose at any time
- further international agreements on how equitable shares of actions between countries is to be allocated
- and primarily according to what the Green Party policies in PSS, RoPS and manifestos could reasonably deliver

However, we will aim to write the RoPS climate target statement so that it is clear enough to be useful, but non-specific enough so that it will need to be changed at each conference or for each policy change.

The policy motion, [1], contains a number of ways that the climate target may be stated.

Target Year

There are various arguments for what date to address in the policy targets. The year 2030 has been selected for a number of reasons:

- the next manifesto is likely to be for a General Election in 2024 and most manifestos are written to cover 5 year parliaments and thus 2030 can be used as the year after the policies introduced will be reflected in emissions
- it is the date for which we have the best data as it is the primary date currently modelled in the EPM (Energy Policy Model) [7]
- it is good to have a date which is some way into the future after which policies can have been introduced and enacted, but not so far into the future that action can be put off
- it is generally easier to predict things in the nearer future based on current technologies and deployment scale
- it is the same year as in current policy so less change in how the target is expressed
- it is the mid-year of the 5th carbon budget (2028 to 2032) and so Green Party ambition can be usefully compared with government policy and work published by the CCC.

Other dates that could have been used:

- 2035. This could have been used as a ten year period of a Green New Deal starting from 2024. This would have allowed a ten year transformation programme as per the 2019 manifesto. However the ten year period of the 2019 manifesto, despite its merits, has been misunderstood as most manifestos are written for one parliamentary term of 5 years. The other problem with using 2035 is that the Green Party policies do not clearly deliver zero by that date. See bullet below. So we can get into making headline claims without having a plan to deliver it (or be close to it).
- year in which the UK will be net zero. This would allow a more straightforward comparison with the CCC / government target of 2050. If we are to address emissions reductions in the UK "net zero" should not be considered as an end date, as it will just be a year on the way to negative UK production emissions. Currently the net zero date is quite hard to establish even with Green Party policies as the emissions for Agriculture and Land Use are so high and are so slow to change. Relying on Negative Emissions Technologies to counter these emissions are not popular within the Green Party.
- 2050. This aligns with the UK CCC / government primary target and we could try to compare with that eg for cumulative CO2 up to that point.

Use of the Energy Policy Model (EPM)

A new version of the EPM is usually published on the Green Party members' website for each conference. The numbers used in the RoPS climate target will come from a specific sheet in the EPM (named "RoPS") which will show both the numbers which are stated in agreed policy in RoPS and how they are re-calculated with the most up to date information. The numbers stated in RoPS will be approximate so that they do not date too quickly and do not appear over-precise.

The numbers used in the initial RoPS will be the best available at the time of the First Agenda deadline and are expected to be aligned with the EPM to be posted on Green Spaces just prior to the Autumn 2022 conference.

RoPS statements

2030 production MtCO2e. This will allow the RoPS climate target to contain something that covers what is currently in CC015. Currently the EPM has ~140 MtCO2e in 2030. This is a 75% reduction from today's emissions on a like for like basis (see figure below under "Sector emissions"). This can be compared with the average of the 5th Carbon budget which is ~390 MtCO2e in 2030 and the Nationally Determined Contribution which is ~320 MtCO2e (see [23] Figure 4). But note that there are differences in carbon accounting which make these numbers less easy to compare (see (Creative) Carbon Counting below). This includes inclusion of international aviation and shipping and high altitude emissions from aviation in

the Green Party number but excluded from some of the government budgets. It is going to be important to have a high level sound bite to use, but also be able to explain the more accurate carbon accounting where time allows.

Halving emissions. As explained above there are difficulties in showing when Green Party policies can reach net zero production emissions. But, as above, our best estimate is currently a 75% reduction in 8 years. With a linear decline in emissions, that would be an over 50% decline in 6 years. But to get a linear decline requires a large amount of behaviour change by year 6. Some of the largest technological changes contributing to achieving net zero, such as offshore wind and deep retrofit of buildings will deliver a lot more than average in years 7 and 8 and relatively little in years 1 and 2. So great caution should be applied in assuming a linear decline (or better) for this purpose, so something worse than linear decline has been assumed for this purpose in the motion. If, halving emissions in 6 years from now (as of 2022), becomes a key Green Party message, then the EPM can be modified to more accurately assess whether the target is achievable with the policies. But the amount of work to do this cannot be achieved prior to Autumn 2022 conference. As, under "Near Term Target" heading (below), the evidence base for what can be achieved in 6 years is considerably thinner than what can be achieved by 2030 or in 10 years, so the confidence in any modelling for this statement is weaker than for other 2030 based calculations.

Note that the proposed RoPS statement on halving emissions in 6 years, is not meant to imply anything about how much reductions could happen in the following 6 years. Nor should it be interpreted as implying how emissions could be reduced in periods less than 6 years.

Net zero There has been considerable criticism of the term "net zero", [14], as it can allow creative carbon accounting. "Net zero" was introduced into Green Party policy in 2017. So it may be advantageous for a clear policy statement of how much sequestration we anticipate within the word "net". Currently the amount of sequestration that is assumed in the headline number for 2030 is about 45 MtCO2e/year in 2030. This is made up of ~20 MtCO2e/year from specific technological sequestration (such as Direct Air Capture) and ~25 MtCO2e sequestration from forests and grassland. Note that forests and grassland sequestration is included in any CCC headline figures and carbon budgets.

Cumulative emissions The largest factor that determines eventual warming of the world is the cumulative amount of CO2 emitted. So the RoPS climate target statement includes the CO2 that would be emitted between two dates (8 years from 2023 to 2030 inclusive of UK production emissions). Alternatively the cumulative emissions could be expressed to align with a budget period as defined by the CCC, so as to have a direct comparison with the UK government ambition. See, for example, the CCC's cumulative emissions for the 6th carbon budget that covers the period from 2033 to 2037 ([21]). Currently the EPM does not yield this number as it does not include a year by year plan. The EPM is being enhanced to give an approximate answer to this by including current CO2 emissions and modelling CO2 emissions in 2030 given the proposed policy set. Then a linear decline between these two has been assumed. A linear decline is a reasonable assumption as long as behaviour changes are done early in the period and technological changes deliver emissions reductions later in the period. This important assumption has been included in the RoPS climate target statement. Without this early action the cumulative emissions could be considerably higher.

Consumption emissions Another area of contention with high level carbon targets is the use of national production emissions. Production (or territorial) emissions are commonly used as they are the agreed way of reporting country's Nationally Determined Contributions as part of the Paris Agreement, [6]. However this can lead to some countries, especially the UK, not taking full responsibility for emissions embedded in its imports. While the current CC015 mentions that these consumption emissions / imports have to be reduced, there is currently no clear target on how much by when. DEFRA is responsible for calculating current emissions in UK imports [15]. It has proved quite difficult to assess what these emissions

currently are (~300 MtCO2e in 2018 in the latest assessment). Despite a large amount of research by the CEPWG, any target for the future is prone with further errors outside of UK policy control:

- accurate life cycle emissions assessments. Often they are counted very selectively giving numbers that are too low
- what action will the rest of the world take by a target date (such as 2030) to reduce emissions intensity of such imports. Will they meet their NDCs (or not) and the overall reduction (45% reduction) included in the Glasgow Climate pact [22]
- how much high carbon imports can be banned by regulation or discouraged by high carbon tax and other policies (eg food)

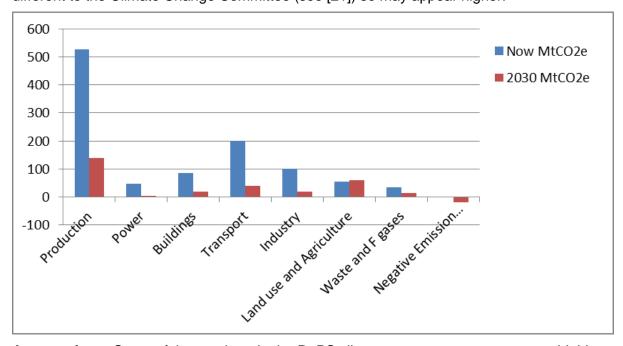
Further work is being done in the EPM to improve the estimate for imported emissions to allow a more accurate statement of consumption emissions in the RoPS statement. However the current number has considerable uncertainty / caveats attached, but is a useful initial guide.

Sector emissions The RoPS climate target statement includes a simple sectoral breakdown of the emissions to align with the headline production emissions statement. Some sectors have been combined to prevent the list being too long. This sectoral breakdown is readily available from much previous research for the EPM. This breakdown gives some sort of perspective on where the residual emissions are – and thus where more policies and action are required after 2030.

The sectors chosen are then directly comparable with those used by the CCC. The sectors will largely be counted as per the CCC with some exceptions as per the totals (e.g. inclusion of high altitude emissions for aviation).

The sector emissions in the RoPS climate target statement are further subdivided in the FPM.

This shows the reductions diagrammatically. Note the Green Party way of carbon counting is different to the Climate Change Committee (see [21]) so may appear higher.



Assumptions. Some of the numbers in the RoPS climate target statement are very highly dependent on assumptions made. Some can be implied from the 2019 General Election manifesto where they are stated as per year numbers.

But some other numbers, especially in the area of transport mode shift, have been stated in addition. The statement of these assumptions helps anchor the other numbers. For example if there was an amendment to have less reduction in aviation, that amendment could only be valid if the production emissions in the RoPS climate statement were increased.

Ambitious interpretation of PSS - Since 2019 the CEPWG have been promoting a highly ambitious interpretation of the PSS with respect to emissions reductions. This means we cannot pick and choose the policies in the PSS that we promote. We must promote all of them. The PSS is often written in qualitative language, so "reducing" something could be interpreted as a 1% reduction or a 50% reduction. Judgement has to be made what is feasible for each policy interpretation, but we have in general taken ambitious interpretations

Reduction in car use - Even when cars are all electric, there are quite large emissions associated with any plan to just replace current cars with electric vehicles. So a 50% reduction in car use is explicitly called out.

Reduction in UK aviation - Aviation emissions are a particular challenge as there are no scalable technology alternatives available by 2030. Where there are technology alternatives, they potentially use resources that would be better used in reducing emissions in other sectors. Thus there is a large assumption about reducing aviation use (particularly international aviation), in order to reduce the transport sector emissions.

Behavioural changes - As noted elsewhere in this briefing paper, we are assuming early behavioural change. A parallel can be made with Covid, where initially the pandemic was largely addressed by behaviour change (eg lock downs) and only later by technology (eg vaccines). If this assumption is not true, the crucial cumulative emissions will be higher.

Near term target. It has been suggested that in addition to 2030 targets, there should be shorter term targets that more immediately challenge the need for action now. This could be in terms of the MtCO2e that could be reduced in a 1 year time frame. There is a sheet in the EPM "One year plan" that could be the start of what would be needed to do this. But this sheet is primarily examining how we could reduce fossil fuel use in the next year to address the current energy crisis, rather than a complete analysis of all the measures that could be put in place in a year to reduce GHGs. It has been the work of many years to collect evidence on what various organisations (eg NGOs (Non Governmental Organizations), government, academics) think could be achieved by 2030. There is quite a rich literature on this. There is not such a rich literature on what organisations think could be achieved in the next year, and when there is, it quickly dates. So any such statement may end up being made on quite a weak evidence base.

There is currently ongoing work that has lead to a separate motion to Autumn 2022 conference that is based on the "One year plan" (see [20]). It may be best to have a separate motion for that and not include it in the RoPS climate target statement for this motion.

(Creative) Carbon counting. There are considerable differences between how the CCC report greenhouse gas emissions (~450 MtCO2e in 2021) ([23]) and how the EPM counts carbon emissions (~525 MtCO2e for "Now-ish") which can lead to misunderstandings. By far the largest difference is Covid adjustments where emissions are likely to bounce back in 2022 from artificially low values in 2021. The other major difference is the way CO2 equivalent is counted for the high altitude non-CO2 emissions from aircraft. The following is a table of the main differences (figures in MtCO2e):

Sector	ccc	EPM	Difference	Comment
Cars	57	67		Car use was less in Covid. EPM uses 2019 as expected for 2022

Sector	ccc	EPM	Difference	Comment
Aviation	15	37	22	Less in Covid. EPM uses 2019 as expected for 2022
High altitude aviation	0	35	35	CCC do not count this
Peat	17	21		Difference in emissions from forests on peat
Shipping	6.3	10.7		CCC under-count this due to just counting fuel from UK
Industry	96.5	101	4	Some Covid impact
UK Production total	447	525	78	

Costings

To achieve the emissions reductions stated in the RoPS climate target statement requires considerable government and private investment.

At the time of the 2019 General election manifesto the emissions reductions were achieved in the context of a Green New Deal package which was approximately £100 bn /year government investment and £50 bn / year private investment over a ten year period to 2030.

This estimate was derived from the Energy Policy Model at the time and rounded down a bit from an overall £1.7 trillion package. Note that the £1.7 trillion, and the numbers stated in the manifesto are investments over and above planned government investments known at the time.

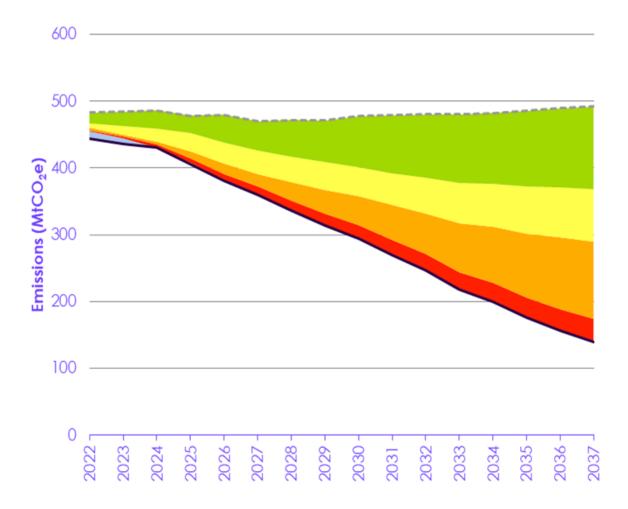
The EPM continues to be refined. The overall package of investments required to 2030 remains largely the same at £1.7 trillion, comparing like (2019) with like (current) as much as possible. But it is now calculated on the basis of 8 years to achieve rather than 10 years.

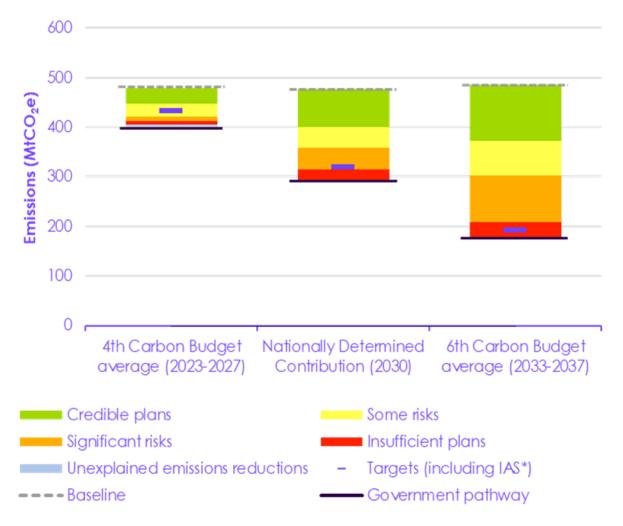
The breakdown of this additional investment is:

- power 25%
- buildings 30%
- transport 12.5%
- industry 12.5%
- land use and agriculture 5%
- other including international aid 15%

Government Policy Gap

The CCC have recently published their report to parliament [23]. The CCC are rightly critical of the government's lack of policy compared with their targets. This is expressed in Figure 4 (reproduced below) which shows how the "credible plans" (in green) are way adrift from the Nationally Determined Contribution target for 2030 and the 6th Carbon Budget for mid 2030s (lower black line).





This sobering report [23] shows quite how large the policy gap is for the government to meet its ambitions but there is a much larger gap to meet the Green Party's ambitions. Stating ambitious targets and creative carbon accounting is no substitute for stating credible policies. The Green Party must not end up in such a position.

Manifestos

It is not proposed to amend the 2019 General Election manifesto , [12], to become consistent with this policy change. A previous attempt was made to make the manifesto more internally consistent between policies and targets but this was rejected by conference So any such effort to achieve consistency with this motion may well be futile.

Instead this motion is preparing the ground for the next General Election manifesto which is starting to be prepared. This manifesto will be produced by 2024 at which time, it is expected that the 2019 manifesto will no longer be party policy. The next General Election manifesto may well replace the RoPS part of this motion. In which case, Policy Development Committee can use their powers to delete the RoPS climate target statement.

Background Papers

There are a number of background documents for policy chapters, including the Climate Emergency, [13] that reflect the current policy target as in policy CC015. The plan is to update these background papers for Spring 2023 conference, in particular climate and

energy background papers, if this motion passes. This briefing paper will not be maintained. Material from it subsumed into policy background papers.

This briefing paper may be used as the basis for any updates to the RoPS climate policy statements that may be required in the future.

Process

Standing Orders for the Conduct of Conference (see [16]) (SOCC E1.3) states "Policy motions should be succinct and not contain excessive background commentary". So the policy motion (PSS part) is kept short to keep the Climate Emergency Policy (in the Policies for a Sustainable Society (PSS) (see [8]) in the current style / brevity. The Climate emergency policy in PSS has already been written in a short form of principles to keep the policy short – as advised by Policy Development Committee (PDC) and this style is maintained.

SOCC [16] E1.3 goes on to say "A separate briefing paper should be submitted which should contain relevant background material, costings, research, consideration of counter arguments, relevance to campaigns etc. (an optional template will be provided by PDC). This paper will be made available on the members' website and at conference."

This document is the separate briefing paper for this motion to cover these points and will be available at [1] with the motion. This will also be posted on the conference agenda forum when available.

References

- [1] Climate targets motion https://spaces.greenparty.org.uk/s/climate-change-policy/?contentId=95563
- [2] Climate Change Act https://en.wikipedia.org/wiki/Climate_Change_Act_2008
- [3] Climate Change Committee https://www.theccc.org.uk/ and https://www.theccc.org.uk/about/our-expertise/advice-on-reducing-the-uks-emissions/
- [4] Green Party 2010 General Election Manifesto https://www.greenparty.org.uk/policies-2010/2010manifesto-environment.html
- [5] Green Party 2015 General Election Manifesto https://www.greenparty.org.uk/we-stand-tor/2015-manifesto.html
- [6] Paris Agreement https://www.un.org/en/climatechange/paris-agreement
- [7] Green Party Energy Policy Model https://spaces.greenparty.org.uk/s/energy-policy-working-group/cfiles/browse/index?fid=11
- [8] Green Party Climate Emergency Policy https://policy.greenparty.org.uk/cc.html
- [9] IPCC Special Report on 1.5C https://www.ipcc.ch/sr15/
- [10] Extinction Rebellion demands https://extinctionrebellion.uk/the-truth/demands/
- [11] Spring Conference 2019 https://spaces.greenparty.org.uk/s/conference-2019/custom_pages/container/view?id=58
- [12] Green Party 2019 General Election manifesto https://www.greenparty.org.uk/assets/files/Elections/Green%20Party%20Manifesto%202019
 .pdf
- [13] Climate Emergency Background Paper https://spaces.greenparty.org.uk/s/climate-change-policy/cfiles/browse/index?fid=524

[14] Greta Thunberg on net zero - https://www.bbc.co.uk/news/av/world-51193460

[15] UK's carbon footprint - https://www.bbc.co.uk/news/av/world-51193460

[16] Standing Orders for the Conduct of Conference - https://spaces.greenparty.org.uk/s/socc/?contentId=76647

[17] UK emissions reductions https://www.carbonbrief.org/analysis-why-the-uks-co2-emissions-have-fallen-38-since-1990/

[18] Greenhouse Development Rights https://en.wikipedia.org/wiki/Greenhouse Development Rights

[19] Net Zero The UK's contribution to stopping global warming https://www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-The-UKs-contribution-to-stopping-global-warming.pdf

[20] One year oil and gas motion https://spaces.greenparty.org.uk/s/autumn-conference-2022-agenda-forum/?contentId=97875

[21] Sixth Carbon Budget https://www.theccc.org.uk/publication/sixth-carbon-budget/

[22] Glasgow Climate Pact

https://unfccc.int/sites/default/files/resource/cop26 auv 2f cover decision.pdf

[23] Climate Change Committee 2022 Report to Parliament https://www.theccc.org.uk/publication/2022-progress-report-to-parliament/

Tony Firkins 16 July 2022