

Report on The Climate Change (Wales) Regulations 2018

November 2018

Introduction

- 1.** The Environment (Wales) Act 2016 (the Act) placed new duties on the Welsh Government to reduce emissions, including a requirement to ensure that net emissions for 2050 are at least 80% lower than the baseline¹.
- 2.** The Act places several duties on Welsh Ministers to ensure the 2050 target is met. These include:
 - By the end of 2018, the Welsh Government must set interim emissions targets for 2020, 2030 and 2040;
 - For each five year budgetary period the Welsh Government must set a maximum total amount for net Welsh emissions (described as a carbon budget), with the first two budgets to be set by the end of 2018; and
 - The Welsh Government must take into account international agreements to limit increases in global average temperatures.
- 3.** The Welsh Government has laid five sets of regulations to give effect to some of the commitments arising from the Act. They are:
 - The Climate Change (Interim Emissions Targets) (Wales) Regulations 2018
 - The Climate Change (Carbon Budgets) (Wales) Regulations 2018

¹ The baseline is defined in Section 38 of the Act as “the aggregate amount of net Welsh emissions of greenhouse gases for the baseline years”. The baseline year for each greenhouse gas is— (a) carbon dioxide: 1990; (b) methane: 1990; (c) nitrous oxide: 1990; (d) hydrofluorocarbons: 1995; (e) perfluorocarbons: 1995; (f) sulphur hexafluoride: 1995; (g) nitrogen trifluoride: 1995.



- The Climate Change (International Aviation and International Shipping) (Wales) Regulations 2018
- The Climate Change (Credit Limit) (Wales) Regulations 2018
- The Carbon Accounting (Wales) Regulations 2018.

4. On 9 November, the Committee wrote to the Cabinet Secretary for Energy, Planning and Rural Affairs to notify her that, in accordance with Standing Order 27.8, the Committee would be reporting on the Regulations. Given the time available, the majority of the scrutiny of the Regulations has been undertaken by correspondence. The Committee has discussed the Regulations with the UK Committee on Climate Change (UK CCC) and stakeholders as part of its work considering the Welsh Government's consultation, "Achieving our low Carbon Pathway to 2030".

Advisory body

5. The Act includes regulation-making provisions for the establishment or designation of a body to advise the Welsh Ministers on its climate change obligations. In the absence of such regulations, the advisory body is the UK CCC. The Welsh Ministers are required to publish the advisory body's advice as soon as reasonably practicable after receiving it.

6. The Welsh Government commissioned the UK CCC to provide it with two tranches of advice. The first tranche related to the design of Welsh carbon budgets and targets (April 2017). The second tranche of advice, related to the levels of emissions targets and carbon budgets (December 2017).

7. The Regulations state that, in preparing them, Welsh Ministers obtained and took into account the advice of the UK CCC, in accordance with section 49(1) of the Act.

Consultation

8. The Explanatory Memorandum accompanying the Regulations states that the UK CCC conducted a public consultation exercise, including discussions with stakeholders, to "capture the views of organisations and individuals on matters relevant to the Regulations".

9. The UK CCC's consultation, to inform its first tranche of advice, ran from 16 December 2016 until 6 February 2017. There were 11 formal responses. The consultation to inform the second tranche of advice ran from 6 July 2017 until 11

September 2017. There were 15 formal responses.. During this period, the Welsh Government and the UK CCC hosted two stakeholder events with around 50 delegates attending in total. In oral evidence to the Committee, the UK CCC confirmed that these responses had been supplemented with many face-to-face meetings with stakeholders.

Decarbonisation delivery plan

10. For each budgetary period, the Welsh Government must publish a Delivery Plan setting out its proposals and policies for meeting that carbon budget. The Act requires the first Delivery Plan to be published as soon as is reasonably practicable following the setting of the first carbon budget.

11. Under the Climate Change (Scotland) Act 2009, equivalent Delivery Plans are subject to a rigorous scrutiny procedure. The Scottish Government must lay a draft Plan before the Parliament for a period of 60 days before being finalised. Although the Environment Act does not place the same requirements on the Welsh Government, the Committee asked the Cabinet Secretary to share a draft of the Delivery Plan with the Committee before its planned publication in March 2019.

12. The Cabinet Secretary confirmed, in correspondence with the Committee, that “a copy of the Delivery Plan will be made available to the Committee in week commencing 18 March 2019”.

Well-being of Future Generations (Wales) Act 2015

13. The Well-being of Future Generations (Wales) Act places requirements on the Welsh Government, and other public bodies, to ensure it considers the social, cultural, economic and environmental impacts of its decisions, both in the short and long-term.

14. The Regulatory Impact Assessment accompanying the Regulations explains that, in assessing the impact of the proposals, the Welsh Government

“procured a methodology that would explore the social, cultural, economic and environmental impacts of potential interventions” under the options to meet our requirements under the Well-being of Future Generations Act (Wales) 2015. The method considers changes that the interventions within the options may bring and maps them against impacts (or benefits and dis-benefits). The changes and impacts were created by considering the well-being goals and our well-being objectives.”

Our view

The UK CCC consulted stakeholders as it was developing its advice for the Welsh Government. We welcome this, despite some concerns about the extent of the response. The Welsh Government has not, however, consulted on these Regulations. Even though the Regulations reflect the advice provided by the UK CCC, we nevertheless believe that a specific consultation with stakeholders would have been desirable.

There has been no opportunity for this Committee to inform the development of the Regulations. The Regulations were introduced in the Assembly on 6 November 2018, and the Committee therefore has had to undertake its scrutiny work within the twenty working day period prescribed in Standing Orders. The Committee has had very limited time to consider the Regulations. In addition, we have only been able to undertake a very limited consultation with stakeholders on the Regulations. While we acknowledge that there is no statutory requirement on the Welsh Government to publish draft Regulations under the Act, we believe it would have been helpful to have been able to consider the Regulations in draft.

We believe this constitutes a missed opportunity. Future iterations of these Regulations should be published in draft by the Welsh Government and should be subject to consultation with stakeholders. The Committee is undertaking a separate piece of work on the Welsh Government's Delivery Plan and will report in due course.

We would like to commend the Cabinet Secretary and her officials for the comprehensive evidence included in the RIA, that demonstrates how the Well-being of Future Generations Act has informed the Welsh Government's approach. While there may be disagreement about the conclusions reached, this is a very welcome development.

We would also like to thank the Cabinet Secretary for her written response to the Committee's questions, which was clear, comprehensive and helpful.

Recommendation 1. Future carbon budgets and associated Regulations should be published in draft by the Welsh Government and should be subject to consultation with stakeholders.

Recommendation 2. The Welsh Government should provide a draft version of the Delivery Plan for its first carbon budget as early as possible before it is published. For future carbon budgets, the Welsh Government should provide a

draft version to the Committee and consult with stakeholders on the draft as early as possible before it is published.

1. Emissions reduction to 2050

The Environment (Wales) Act sets a target to reduce emissions by at least 80% (on 1990 levels) by 2050.

15. The Paris Agreement was reached at the United Nations Framework Convention on Climate Change negotiations in 2015. The aim of the Agreement is to “hold the increase in global temperature to well below 2 degrees C above pre-industrial levels and to pursue efforts to limit it to 1.5 degrees C”.²

16. The EU (on behalf of Member States) is a party to the Paris Agreement. In reference to the relationship between Welsh reduction targets for 2050 and the Paris Agreement, the UK CCC says –

“The range of per-capita emissions at global level consistent with staying below 2°C would imply reductions of between 83% and 90% in Wales.

The range of per-capita emissions levels for 1.5°C would imply reductions of between 92% and 98% in Wales.”

17. The advice goes on to say that, as the Environment (Wales) Act requires that net emissions for 2050 are at least 80% lower than the baseline, this would not preclude Wales from going beyond an 80% reduction.

18. In October 2018, the Intergovernmental Panel on Climate Change (IPCC) published its latest report on Global Warming of 1.5°C. The special report looks at the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways. The authors of the report say that urgent and unprecedented changes are needed to reach the 1.5°C target, which they say is affordable and feasible despite the fact that it lies at the most ambitious end of the Paris Agreement pledge to keep temperatures between 1.5°C and 2°C.

19. The latest emissions statistics published by the Welsh Government, show that, in 2015, Welsh emissions were 19% below 1990 levels. Total emissions in

² Building a low-carbon economy in Wales, December 2017

Wales increased by 5% in 2016. Over the same period, emissions across the UK fell by 27%.

Evidence from the UK Committee on Climate Change

20. The UK CCC confirmed it believes it would be appropriate to reconsider the 2050 target, in the light of the conclusions of the recent IPCC Special Report on Global Warming, saying that it “gives us good deal more evidence to consider about how the UK can contribute to a global ambition of limiting global warming to 1.5°C above pre- industrial levels”. It went on to explain that:

“The Committee is considering when the UK should reach net zero emissions of carbon dioxide and/or greenhouse gases as a contribution to global ambition under the Paris Agreement; if that target should be set now; the implications for emissions in 2050; how such reductions can be achieved; and the costs and benefits involved in comparison to existing targets.”

21. In reference to the 2050 target, the UK CCC said:

“Following our advice in spring 2019, it may be necessary to make the 2050 target and the interim targets more ambitious if evidence supports that these are achievable and necessary.”

22. The Committee asked if it would be appropriate for the Welsh Government to reconsider the 2050 target before each carbon budget is set. The UK CCC disagreed with this suggestion, adding that:

“There is merit in maintaining a clear and stable long-term target until major changes in the climate science and/or major events, such as the Paris Agreement, necessitate a review of the targets based on a thorough consideration of the relevant evidence.”

23. In response to a question about the impact that a more ambitious target for 2050 could have on interim targets, the UK CCC said:

“The interim targets are currently our best estimate of the cost-effective path to an 80% reduction by 2050 for Wales. These should be met as an absolute minimum – any tighter 2050 target may require bigger and faster reductions in emissions.”

24. They went on to say:

“Actions taken in the nearer term should keep open the possibility of reductions beyond 80% by 2050 – for example building efficiency measures, low-regret heating options, decarbonising the power sector, switching to EVs, promoting active travel, and planting trees.”

Cabinet Secretary’s evidence

25. The Committee asked the Cabinet Secretary whether she was satisfied that her proposed approach strikes the right balance between achievability and ambition, given that it will not meet the aims of the Paris Agreement. She responded that:

“Wales’ emissions profile is very different to the rest of the UK nearly 60% of our emissions come from heavy industry and electricity generation (referred to as the ‘traded sector’ under the EU Emissions Trading Scheme) compared to 36% for the UK as a whole.”

26. She went on to say that the UK CCC had suggested that an “80% reduction for the UK implies a 76% reduction in Wales. By adopting a 2050 target of ‘at least 80%’ we are arguably making a proportionally greater contribution to the Paris Agreement than the UK as a whole. Accordingly our proposed approach provides the best balance between achievability and ambition, given Wales’ emissions profile”.

27. In reference to the continued viability of the 2050 target, the Cabinet Secretary said she had written to the UK Minister of State for Energy and Clean Growth “to approve a joint commission for advice from the CCC in relation to how the evidence in the IPCC report might affect our long-term emissions reduction targets. Whilst our focus now is rightly on the action to deliver our low carbon objectives”.

28. Finally, the Committee asked the Cabinet Secretary to give a commitment to reconsider the 2050 target before setting the next carbon budget. The Cabinet Secretary responded that the UK CCC’s advice was expected in April 2019 and said:

“We will consider this advice and its implications for our statutory framework and report back to the Assembly before setting the third carbon budget. We will also consider the other sources of evidence described in the Environment (Wales) Act 2016.”

Estimated costs of meeting the 2050 target

29. The Regulatory Impact Assessment accompanying the Climate Change (Wales) Regulations sets out four options that have been considered by the Welsh Government in determining its pathway towards the 2050 target. Each option includes details of the costs, benefits and wider impacts associated with its implementation.

30. The Welsh Government's preferred option is a pathway to achieve an 80% reduction below the baseline by 2050. Other options, which are not preferred, include a pathway based on the UK CCC's advice on the maximum potential reduction for Wales (85%).

31. The costs and benefits of the Welsh Government's proposed options are assessed against a baseline "business as usual" option that maintains existing levels of action up to 2050.

32. The Welsh Government estimates the costs for its preferred approach, as set out in the Regulations, as being £258 billion up to 2050. The Regulatory Impact Assessment provides further information on the costs and benefits of the approach.

Cabinet Secretary's evidence

33. The Cabinet Secretary said that an accurate projection of the costs of future emission pathways and "the impact of specific policies and proposals upon them is challenging and highly uncertain, especially for long-term projections out to 2050". The Cabinet Secretary said that a "Wales-specific emissions projection tool (the Wales 2050 calculator)" had been developed to:

"test the recommendations of the CCC and to provide further detail to inform our RIA. This is under continual development and refinement within government to ensure we have the best possible insight into future emissions pathways. Although it looks at emissions in a different way it has provided a valuable gauge against which to test the CCC's scenarios and has produced results which are broadly consistent with those produced directly by the CCC."

Our view

If, as set out in the Regulations, the Welsh Government pursues a pathway towards a reduction of 80% by 2050, it will not meet the aims of the Paris Agreement.

The Committee is disappointed by this. We recognise that a balance must be struck between ambition, achievability and cost, but we believe strongly that the Welsh Government must aim to play its part in international emissions reduction. The starting point for this must be the aims of the Paris Agreement. The conclusions of the recent IPCC report only serve to emphasise the need for urgent and ambitious action.

We are pleased that the Cabinet Secretary is seeking advice from the UK CCC in relation to how the evidence in the IPCC report might affect long-term emissions reduction targets. We believe this must happen quickly, while a more ambitious target is still achievable. We welcome the Cabinet Secretary's commitment to report back on this matter before the third carbon budget is set.

We note that in 2015, Welsh emissions were 19% below 1990 levels. Over the same period, emissions across the UK fell by 27%. There are serious questions to be answered about whether the Welsh Government's lack of progress to date has made it more difficult to catch up. It is possible that, had emissions in Wales matched the UK, we could be aiming at a more ambitious target for 2050, which could deliver on the aims of the Paris Agreement.

The Committee recognises that the majority of Welsh emissions (nearly 60%) come from non-devolved policy areas. This could limit the potential impact of Welsh Government interventions. Nevertheless, the Welsh Government will need to ensure it does all it can to ensure progress is made in devolved areas. It has fallen short up to now.

Recommendation 3. The Welsh Government should review its 2050 target and report back to the Assembly before its third carbon budget is set.

2. Interim targets

Interim targets for 2020, 2030 and 2040 are set in The Climate Change (Interim Emissions Targets) (Wales) Regulations 2018.

34. The Explanatory Memorandum describes the purpose of these Regulations as setting out decadal targets “that represent a pathway to the 2050 target established in the Act”, i.e. at least 80% lower than the baseline.

35. Section 30(1) of the Environment (Wales) Act 2016 (the Act) provides that, for each interim target year (2020, 2030, 2040), the Welsh Ministers must by regulations set a maximum amount for the net Welsh emissions account, expressed as a percentage below the baseline.

36. The Regulations reflect the advice of the UK CCC and set out the interim emissions targets as follows:

- The maximum amount for the net Welsh emissions account for 2020 is 27% lower than the baseline.
- The maximum amount for the net Welsh emissions account for 2030 is 45% lower than the baseline.
- The maximum amount for the net Welsh emissions account for 2040 is 67% lower than the baseline.

37. Section 32(1) of the Act provides that the Welsh Ministers must set each interim emissions target at a level they are satisfied is consistent with meeting the 2050 emissions target. The Regulations confirm this is the case.

Evidence from the UK Committee on Climate Change

38. The UK CCC’s suggested pathway constitutes a smooth trajectory towards the 2050 target. The Committee queried what risks could arise as a result of this approach, in comparison to a steeper initial trajectory, which was described as “front-loading” reductions. The UK CCC said:

“Whilst our smooth trajectory is the lowest cost approach compared to a ‘front-loaded’ trajectory, it could make deep reductions more difficult in the long run if long-term options are not developed in parallel.

It is important to ensure that long-term options are developed alongside the deployment of low-cost options in the short term. Our cost-effective path is designed to balance these two priorities in a cost-effective way.”

39. However, they went on to emphasise that “certain aspects of ‘front-loading’ could also come with much higher costs than the measures in our cost-effective path or suboptimal decisions from a longer-term perspective (e.g. by diverting lots of biomass to domestic heating)”.

The 2020 interim target of 27%

Evidence from the UK Committee on Climate Change

40. In its advice to the Welsh Government, the UK CCC referred to the “particular challenge” of the 2020 interim target:

- “The scope for new policies to affect the level of admissions in 2020 is very limited, especially if the Welsh Government waits until after the target is legislated to bring forward policies to achieve it”.
- “There is a large amount of uncertainty over the future emissions from the Aberthaw coal-fired power station”.

41. On the latter point, the UK CCC advised that the 2020 interim target should be altered, should Aberthaw cease to emit entirely, or at significant levels, prior to 2020.

42. The UK CCC said that, “based on 2015 NAEI³ inventory and the ‘Business As Usual’ scenario used to set original Welsh advice”, its projections for Welsh emissions levels in 2020 is 23% below the baseline. This projection excludes international aviation and shipping. They said:

“We have not updated this evidence to reflect the latest (NAEI, 2018) inventory, although we note that this has revised downwards estimates of emissions reductions since 1990 (e.g. by 2 percentage points for 2015, from 20% below 1990 emissions to 18%).”

43. In reference to the 2020 interim target, the UK CCC said:

³ National Atmospheric Emissions Inventory

“Much of this policy effort to reach the 27% reduction comes from UK government policies (e.g. the increase in the Renewable Transport Fuels Obligation).”

Cabinet Secretary’s evidence

44. In reference to the Welsh Government’s projections for the level of emissions by the first interim target in 2020, the Cabinet Secretary confirmed that “we believe current policy is sufficient to place emissions on a trajectory to deliver a 27% reduction against the 1990 baseyear by 2020”. However, the Cabinet Secretary went on to say:

“Wales’ emissions profile and the high contribution from energy-intensive industries covered by the EU-ETS makes Wales particularly susceptible to year-to-year volatility in emissions, which is shown by the recent 2016 emissions data. Changes in how much energy is used or productivity in industry, can affect our overall emissions. As such there is considerable uncertainty in projecting emissions for a single year in the future and, as recommended by the CCC, it is prudent to ensure we have sufficient flexibility mechanisms, such as international offsets, to account for unforeseen circumstances.”

45. In response to a question about her understanding of the timetable for the closure of Aberthaw power station, the Cabinet Secretary said:

“As it is a private sector commercial enterprise, we do not have a firm date for any future closure of the Aberthaw power station. However, we are aware the current Capacity Market contract held by RWE ceases in 2021. We agree with the CCC’s view that the site will be subject to the UK Government commitment to phase out unabated coal generation by 2025. We also agree the Industrial Emissions Directive (IED) requirements will influence overall emissions from Aberthaw over the period up to 2025. As such we are confident in the scenarios in which the cessation of unabated coal generation at Aberthaw contributes significantly to the delivery of our 2030 interim target.”

Our view

We note that the Welsh Government is confident that the 2020 interim target will be met, based on its current estimates. However, the UK CCC’s projections appear to be less optimistic – its “business as usual” projection estimates a level of reduction of 23%. We recognise that the UK CCC advises caution in

interpreting this projection, as it does not include international aviation and shipping and its projections do not reflect the latest National Atmospheric Emissions Inventory.

However, this projection suggests that the Welsh Government may miss its first interim target.

We recognise that predicting emissions levels is complicated. The target may indeed, be met. If it is not, the Welsh Government will be able to address any shortfall by buying carbon credits. Nevertheless, there is a serious reputational risk if the first interim target is not met and if offset credits need to be used because of policy failure.

The UK CCC has said there is little scope for new Welsh Government policies or interventions to meet the 2020 target. Indeed, it expects that much of the “policy effort” will come from UK Government policies. Despite this, most of the progress towards meeting this target should have been made by now. Whether or not the 2020 target is met will be a reflection of the Welsh Government’s policies up to and during the whole of this budgetary period (2016-20).

Recommendation 4. The Welsh Government should ask the UK CCC to ensure that its reports on progress to reduce emissions are broken down into areas of devolved and non-devolved policy. This will enable the Welsh Government to be held to account for the direct impact of its policies.

3. Carbon budgets

The Climate Change (Carbon Budgets) (Wales) Regulations 2018 set the first two carbon budgets.

46. The Explanatory Memorandum describes a carbon budget as “setting a maximum limit on the total amount of Welsh emissions permitted over a 5-year budget period”. The first budget period runs from 2016 to 2020, with subsequent budgets covering successive 5-year periods to 2050.

47. Section 31 (4) of the Environment (Wales) Act 2016 provides that the Welsh Ministers must set the carbon budgets for the first two budgetary periods (2016-20 and 2020-2025) by the end of 2018.

48. The Regulations set out the first two carbon budgets. They are:

- For the 2016 to 2020 budgetary period, the carbon budget is limited to an average of 23% lower than the baseline.
- For the 2021 to 2025 budgetary period, the carbon budget is limited to an average of 33% lower than the baseline.

49. These carbon budgets reflect the advice of the UK CCC. In its advice to the Welsh Government, the UK CCC said there was little scope for new policies to deliver the first carbon budget because of the lack of time left in that budgetary period.

50. The Regulatory Impact Assessment accompanying the Regulations states that the costs of delivering both carbon budgets will not be known until the specific policy interventions are determined. The costs of delivering the first and second carbon budgets are *estimated* to be an additional £2bn and £14bn respectively, compared to the baseline of no additional interventions.

51. The estimated costs are set out in the Regulatory Impact Assessment as follows:⁴

Sector	Carbon Budget 1 (2016-2020)	Carbon Budget 2 (2020-2025)
Power	£3bn	£12bn
Transport	-£1bn	£1bn
Buildings	>£1bn	£1bn
Agriculture and Livestock	>£1bn	>£1bn
Industry	>£1bn	>£1bn
Waste	£0bn	£0bn
TOTAL	£2bn	£14bn

Evidence from the UK Committee on Climate Change

52. The UK CCC emphasised the importance of setting carbon budgets well in advance as a way “to encourage long-term planning and provide certainty for government, investors, and consumers”. It recognised that, as a result of the timelines set out in the Act, when the third Welsh carbon budget is set in 2020, the Assembly will not know whether the first carbon budget has been met. It said this experience was consistent with other legislatures.

⁴ *Estimated costs per sector for the first and second carbon budgets under Option 2, additional to Option 1 (Baseline - no further policies)*

53. However, the UK CCC emphasised that the Assembly “will have good evidence from the latest inventory about the level of emissions up to at least 2018”. This will give a “good idea of the trajectory and whether Wales is on track to meet its first and second carbon budgets”.

Cabinet Secretary’s evidence

54. In reference to the estimated costs for the first Carbon Budget (2016-2020), the Cabinet Secretary emphasised that all of the costs included in the RIA were provided for illustration purposes. The costs would “be dependent on the actions taken in the budget period”. She said:

“The start of the 2016-2020 period is where the model scenarios diverge from the baseline, therefore the additional £2 billion arises over the period 2016-2020 and not just in the last two years of the budget period.”

55. The Committee asked the Cabinet Secretary to provide further information about the difference of £12bn between the estimated costs for the first two carbon budget periods. The Cabinet Secretary explained:

“In the chosen scenario the largest cost increases between the first and second budget fall in the power sector, accounting for approximately 75% of costs. This is not however surprising, given 70% of the costs over the whole of the scenario to 2050 are forecast to be in the power sector. These are attributed to capital investments. Similarly the sector with the second largest increase in costs between the first two budgets is transport, also the second largest when looking at costs over the whole scenario.”

56. The Cabinet Secretary said that “the increase in costs in the power sector in the second budget period is attributed to the capital costs in the nuclear industry and to a lesser extent grid infrastructure”.

Our view

When the third Welsh carbon budget is set in 2020, the Assembly will not know whether the first or second carbon budgets have been met. We recognise the importance of setting carbon budgets in advance, but can’t help but feel that this indicates there is a flaw in the process.

We are somewhat reassured by the UK CCC’s comments that other legislatures have adopted procedures with similar timescales and, consequently, also

experience such issues. We trust, therefore, that solutions can be found that ensure that scrutiny does not suffer.

The Committee will return to this matter in due course, in the light of more experience of the budget setting and reporting cycle.

The estimate of costs accompanying the first carbon budget is confusing. The Committee notes the Cabinet Secretary's comments that "the additional £2 billion arises over the period 2016-2020 and not just in the last two years of the budget period". It is difficult to see how costs can be incurred in 2016-18 as a result of new policies that the Welsh Government is yet to introduce. We believe this should be clarified.

We will expect to see full and accurate costings for the actions that arise from the Delivery Plan, when it is published in March 2019.

Finally, the Welsh Government appears to be relying on the closure of Aberthaw to deliver a significant proportion of target reductions. If it is closed during the first or second budget periods, the Welsh Government should amend its targets, in accordance with the UK CCC's advice.

Recommendation 5. The Welsh Government should publish a comprehensive assessment of the cost and anticipated impact of each intervention included in its first Delivery Plan.

4. International aviation and shipping

Arrangements for calculating emissions from international aviation and shipping are set out in The Climate Change (International Aviation and International Shipping) (Wales) Regulations 2018.

57. Section 35 of the Act provides that the Welsh Ministers may by regulations make provisions for emissions of a greenhouse gas from international aviation and shipping to count as Welsh emissions. Emissions from international aviation and shipping were not included in previous policy targets.

Evidence from the UK Committee on Climate Change

58. The UK CCC informed the Committee that emissions from international aviation and shipping Wales in 2016 were 1% of total emissions and "their

inclusion is unlikely to have a major effect on Wales' performance against economy-wide targets". The UK CCC said the Welsh Government's approach is "clearer and more flexible" than the approach taken at a UK level.

59. In reference to any potential risks arising from the decision to include these emissions in Welsh emissions targets, the UK CCC said:

"The primary risk is that since Wales does not have devolved control of IA&S [International Aviation and Shipping] policy, a target which includes IA&S is more reliant on UK and international action. However, in setting the carbon budgets for Wales we have not assumed any emissions reductions from Welsh or UK unilateral policy action in these sectors."

Cabinet Secretary's evidence

60. The Cabinet Secretary described the inclusion of these emissions as "the most transparent approach and is recommended by the CCC". She said:

"We estimate these emissions accounted for around 2% of Welsh emissions in 2015 but this number will increase over time if they do not reduce in line with emissions from other sources. Counting these emissions is an important first step to spur action in these sectors."

61. She went on to say there are "encouraging signs around this area":

"In April 2018, the International Maritime Organisation (IMO) agreed an initial strategy to reduce emissions from international shipping, including a reduction objective of at least 50% by 2050, compared with 2008 levels. In June 2018, International Civil Aviation Organisation (ICAO) Council adopted standards and recommended practices as part of its carbon offsetting and reduction scheme for international aviation (CORSIA). CORSIA aims to stabilise international aviation emissions at 2020 levels."

Our view

We agree that the Welsh Government's approach is clear and transparent. However, the addition of emissions from policy areas that are not devolved does carry some risks. Although Wales' share in emissions in this area are not significant, it is an area where the impact of Welsh Government intervention is limited.

5. Net Welsh emissions accounts

Provisions in relation to the net Welsh emissions account and offsetting carbon units are set out in The Climate Change (Net Welsh Emissions Account Credit Limit) (Wales) Regulations 2018.

62. The Explanatory Memorandum describes the purpose of the Regulations as “setting a limit on the total amount that the net Welsh emissions account can be reduced through the use of carbon units”.

63. The Regulations set a limit on the use of offset credits for the first budget only. In the Regulatory Impact Assessment, the Welsh Government explains that –

“A limit is required in recognition of the need to ensure that business and wider sectors in Wales have certainty in the level of domestic emissions reduction we are committed to.”

64. In developing these Regulations, the Welsh Government considered three options for limiting the maximum amount of carbon units that can be used to meet the first carbon budget. They were –

- Option 1 – a zero limit, or a limit of under 3% of the first budget;
- Option 2 – a limit of 10% of the first budget; or
- Option 3 – a limit greater than 10% of the first budget.

65. The Welsh Government’s preferred option was option 2 – a 10% limit. This is reflected in the Regulations.

Evidence from the UK Committee on Climate Change

66. In reference to the use of offset credits, the UK CCC said:

“The planned first carbon budget will require an average 23% reduction against the 1990 baseline. Based on the latest available emissions data, this target would require annual emissions between 2016 and 2020 to be below 43.3 MtCO₂e on average.

A maximum limit of 10% would therefore permit the use of 4.3 MtCO₂e of offset credits per year on average. This would allow flexibility for a

30% increase in annual emissions from industry compared to 2016, to levels not seen since 2001. The Committee therefore believes this limit would provide sufficient flexibility.”

67. However, the UK CCC reiterated its original advice – that “within this legislated limit, it is only appropriate to use credits in specific circumstances such as industrial output being higher than assumed when the targets were set”.

68. The UK CCC has previously advised the Welsh Government that the use of credits should require prior advice from the UK CCC. It explained that:

“Offset credits should be used only as a last resort in exceptional circumstances, and the Welsh Government should seek advice from the Committee prior to their use towards meeting emissions targets to ensure that it is an appropriate response to unforeseen circumstances.”

Cabinet Secretary’s evidence

69. The Cabinet Secretary confirmed that the Welsh Government was “not planning to use carbon units to meet the first carbon budget and so we do not have a projection of the amount of carbon units which may be required”. She said that:

“We intend to meet the first carbon budget by delivering the actions in our forthcoming report and by the actions of the UK Government in non-devolved areas.”

70. However, she went on to say that:

“carbon units are an important feature of our emissions reduction framework as they provide flexibility in the event of changes to the greenhouse gas inventory, increases in industrial emissions or a run of cold winters.”

Cost of offset credits

Cabinet Secretary’s evidence

71. In reference to the potential cost of the purchase of offset credits, the Welsh Government estimates this as follows:

“in the event that the 10% limit is used to its maximum the cost for the first budget period is expected to be a maximum of £3.4 million. It is important to note that the price of offset credits is highly variable, and

the cost of using the 10% limit is estimated to range from £112 million to £1.12 billion.”

72. The Cabinet Secretary commented on the risks arising from the variability of the price of offset credits. She said that predicting the future costs of offset credits is very difficult, “therefore the RIA provides a range of possible costs”. She went on to explain:

“As offset credits are a global trade, the cost to the Welsh Government of any purchase would be subject to changes in the international market are outside of our control. We anticipate an increase in the price of offsets after 2020. We are required to set an offset limit for each carbon budget and the future price of offsets will inform these decisions as financial considerations are a factor in determining the split between domestic and international action.”

73. In reference to ways of mitigating against those risks, she said:

“Offset credits do not have an expiry date so one possible mitigation strategy would be to buy them while they are cheap. However, we are not planning to use offset credits to meet the first carbon budget and we are not necessarily in a position to spend several million pounds on something we might not need.”

Our view

We agree with and endorse the UK CCC’s view that offset credits should be used only as a last resort in exceptional circumstances. We believe that the Welsh Government should seek advice from the UK CCC prior to their purchase and use. We believe that the advice should be published.

Recommendation 6. The Welsh Government should seek advice from the UK CCC prior to the purchase and use of offset credits. The Welsh Government should publish any advice it receives from the UK CCC on such matters.

6. Carbon accounting and carbon units

The Carbon Accounting (Wales) Regulations 2018 make provision about carbon accounting and carbon units for the purposes of calculating the net Welsh emissions account.

74. Section 36(1) of the Environment (Wales) Act 2016 (the Act) provides for a definition of a carbon unit as a unit of a kind specified in Regulations made by the Welsh Ministers.

75. The Regulations allow for the inclusion of emissions produced by the traded sector, i.e. the European Union Emissions Trading Scheme (EU-ETS) sector, in the net Welsh emissions account. This will mean that all Welsh emissions are counted.

76. The UK CCC has advised that emissions from the EU-ETS sector should be included in the net Welsh emissions account. The Regulatory Impact Assessment (RIA) explains that –

“The CCC recognises industrial emissions present a specific challenge within the devolved setting where large changes in emissions can occur as a result of business decisions at individual sites, over which Wales has little control.”

77. The RIA explains that the UK CCC has suggested two specific solutions to address this issue.

- that Welsh Ministers should be able to revise budget levels as a result of significant changes in industrial emissions. This is permitted under the Environment (Wales) Act 2016.
- that flexibility is available to Welsh Ministers to offset carbon units where budgets could be missed specifically because of unexpected increases in emissions from Wales’ industrial sectors. This is provided for in The Climate Change (Net Welsh Emissions Account Credit Limit) (Wales) Regulations 2018.

Evidence from the UK Committee on Climate Change

78. In response to a query about the potential impact of emitters not being able to continue to trade under the EU-ETS, the UK CCC said that “Welsh carbon budgets are based on ‘actual’ emissions and not adjusted for EU ETS allowances, so there would be no technical impact on the way emissions are accounted for against targets”.

79. However, the UK CCC identified the following risks:

“Any changes in emission behaviour due to changes in the EU ETS could directly affect the power, heavy industry, and aviation sectors

but also indirectly affect the rest of the economy through changes in electricity prices.

Any risk would mainly be around whether stopping emitters trading under EU ETS incentivises greater GHG emissions due to a change in the total carbon price.”

Cabinet Secretary’s evidence

80. The Committee asked about the risks for meeting carbon budgets if emitters cannot continue to trade under the EU-ETS. In reference to the first carbon budget, the Cabinet Secretary said:

“The trajectory of emissions reduction set for participants in Phase III of the EU ETS based in Wales will remain exactly the same to the end of 2020 irrespective of the outcome of the EU exit negotiations. In the event of an orderly transition period, we anticipate UK based participants will remain in the EU ETS until the end of Phase III. Phase III covers emissions generated from 01 January 2013 until 31 December 2020.

In the event of a disorderly exit, the UK Government has indicated it will initially meet its existing carbon pricing commitments via the tax system, taking effect in 2019. The Budget 2018 announcement stated, in the event the UK leaves the EU without an agreement in March 2019, a new Carbon Emissions Tax would be introduced from 1 April 2019 on emissions of carbon dioxide (and other greenhouse gases on a carbon equivalent basis) from UK stationary installations currently in the EU ETS. The aviation sector would not be subject to the Carbon Emissions Tax. This system, which does not pre-judge other long- term future carbon pricing options, would provide certainty and continuity in the short term and would maintain similar arrangements for industrial installations deemed to be exposed to significant risk of carbon leakage, to support their competitiveness. A regime of Monitoring, Reporting and Verification of emissions will continue after exit day.

81. The Cabinet Secretary said she believed the “decision of the UK Government to take a unilateral decision in an area of devolved competence was regrettable” She said that Welsh Ministers should have been involved in a joint decision with other UK administrations to ensure specific Welsh interests were taken into account. She added:

“We are now pressing for a joint Ministerial forum to determine future policy in order to deliver the best scheme for the whole of the UK.”

82. In reference to the second carbon budget, the Cabinet Secretary said:

“We are confident our highest emitters will continue to be incentivised to decarbonise through the second budget period and beyond.

Welsh Government officials participate in a Working Group with officials from the UK Government and the Devolved Administrations to develop options on the long-term policy alternatives. There is common interest in continuing a carbon pricing policy to stimulate emissions reduction and it is encouraging the UK Government has indicated it has aspirations for future policy to be at least as ambitious as the current regime. However, there are a number of options for the detailed policy to meet this outcome. Given the policy area is devolved, Welsh and Scottish Ministers have jointly written to the UK Government to stress the need for joint decision making on a future scheme.

83. In reference to potential longer-term arrangements, the Cabinet Secretary said:

“There are a number of potential options over the long term, which will be influenced by the shape of any future economic partnership. These include remaining in the EU ETS, establishing a UK ETS either on a stand-alone basis or linked to the EU system or another global trading scheme. Given the devolved policy area, there are also options for standalone Welsh policies.”

Our view

This is a matter that the Committee has considered on several occasions. We are pleased that the position is becoming clearer and that it appears that progress is being made.

We support and endorse the Cabinet Secretary's efforts to press for a joint Ministerial forum to determine future policy in order to deliver a successor scheme for the EU-ETS.

The Committee will continue to seek regular updates on progress from the Cabinet Secretary.

Recommendation 7. The Welsh Government should update the Committee on progress of developing successor arrangements for the replacement of the EU-ETS.