

SGN's Customer Engagement Group Final report December 2019



Customer Engagement Group



Maxine Frerk Chair of our CEG group and is an experienced regulatory and consumer expert in the energy sector



Lucy McTernan Deputy Chair in Scotland and has a career in the Scottish voluntary sector spanning 25 years



Claire Whyley Deputy Chair in the south of England and a professional researcher and policy analyst



Jamie Stewart Energy Policy Manager at Citizens Advice Scotland



Laura Brinker UKERC-funded PhD student at the Environmental Change Institute at Oxford University



Rosie McGlynn Founder of Mentone Energy Consultancy



Ben Hudson Programme Coordinator, LSx



Ragne Low Independent analyst and Edinburgh University student



Ben Knight A specialist in public consultation and research for utilities and regulators



Ian McCluskey Industry Safety Group



Mike Gregory Head of Technical Services at Director of Avocado, Charlwood IGEM and Director of the Gas and member of the Federation of Small Businesses



Eddie Lafferty Director at Lafferty Associates



Joel Atherton Senior Policy Researcher in Citizens Advice's Energy Networks and Systems team



Syed Ahmed Director of Energy for London, Asset and Regulation Director, an independent think tank



David Hinton South East Water



Shona Cargill Works at Resource Efficient Solutions



Norman Kerr Director of Energy Action Scotland

Contents

Executive summary1
Introduction – the SGN Customer Engagement Group4
Chapter by chapter comments on SGN's Plan
Chapter 1: Introducing SGN
Chapter 2: Track record
Chapter 3: Business plan commitment and assurance
Chapter 4a: Enhanced engagement9
Chapter 4b: Engagement in GD215
Chapter 5: Customer Value Proposition17
Chapter 6: Making a positive impact
Chapter 7: Delivering a safe and efficient service25
Chapter 8: Resilience
Chapter 9: Building a shared net zero future
Chapter 10: Environmental Action Plan (EAP)
Chapter 11: Whole systems solutions
Chapter 12a: Managing uncertainty mechanisms41
Chapter 12b and 12c: RPEs and efficiency43
Chapter 13: Innovation
Chapter 14: Competition
Chapter 15: Forecasting and scenarios47
Chapter 16: Totex
Chapter 17: Workloads and activities
Chapter 18: Financing
Appendix 1- Summary of CEG impacts on the plan50
Appendix 2- CEG Criteria for assessment of engagement53

Executive summary

SGN's business plan ('the plan') has been underpinned by extensive consumer and stakeholder engagement, much of which has been undertaken to a high standard. The Customer Engagement Group (CEG) considers that overall, SGN has taken a proportionate approach using a mix of methods, including relying more on stakeholder than customer input in some of the more complex areas.

SGN's engagement has covered a wide group of stakeholders and customers across its two regions, including SMEs and good engagement with vulnerable customers. With more time in the overall process and a more strategic approach at the outset, we believe there could have been scope to explore some issues in more depth with customers, to explore more fully the views of large gas users and future consumers, and to establish links with an increasingly wide set of stakeholders. We are pleased that SGN has signalled its intention to continue to build on this strong foundation as it moves into GD2.

We have been pleased with the extent to which SGN has evolved its plan over the course of the process in response to our feedback and challenge, and also feedback from customers and stakeholders. Engagement has clearly and visibly helped shape the plan from the start.

From the different phases of research it has done, SGN has developed a sense of its customers' broad priorities, including the growing emphasis on the environment, which underpin the plan.

On customer service, SGN is already performing well (with CSAT scores over 9 out of 10) and, in line with the lower priority attached to that area by customers, is not looking to set more stretching targets which would add to costs. We have encouraged SGN to continue to look for ways of improving service without necessarily adding to cost as part of business as usual, which it has confirmed it will do. We see this as an area where the CEG could have a valuable oversight role going forwards.

On help for vulnerable customers, SGN has found that, across the majority of domestic customers, there is a strong willingness-to-pay for additional support. SGN has engaged well with stakeholders to help in identifying the balance between helping more customers a little versus helping fewer customers more materially. SGN has also engaged well to identify specific potential initiatives and present a clear proposal for oversight of its spend in this area, enabling SGN to respond flexibly to needs as they arise through GD2. We hope this will also include meaningful measurement of impact.

SGN has proposed a bespoke financial incentive on social value collaboration. The CEG is very supportive of this proposal both as a way of promoting more use of social value analysis and to address the specific issue around coordination of street-works to minimise the negative impacts they have on customers' wellbeing. We consider the case for the proposed incentive has been well evidenced through engagement with customers and expert stakeholders.

On safety and reliability SGN is clear that this is customers' top priority but that they consider that SGN is already delivering well and are not looking for significant additional spend in this area. Given the nature of the business and SGN's legal responsibilities, SGN does place a very strong emphasis on maintaining the safety of the network. However, acknowledging the uncertainty about the future of the gas network in the context of heat de-carbonisation we are satisfied that, for example, the 4Rs strategy means that SGN is generally taking an approach which minimises investment in GD2 while uncertainty remains.

The repex programme is the largest element of spend in SGN's plan and as such the CEG has taken a particular interest in it. Early on SGN carried out some excellent stakeholder engagement to help them in thinking about the potential for accelerating the programme (rather than maintaining a constant delivery rate through to the HSE 2032 deadline). Stakeholders identified a range of factors in favour of an accelerated programme and as such, the CEG has been supportive of the proposal throughout. At one point SGN was proposing to drop the idea – noting customers' reluctance to spend more on safety – but the CEG pushed back. As a result, and reinforced by the strong customer support for tackling leakage to reduce greenhouse gas emissions, SGN included it back in its plan.

While a smaller element of spend, some capex is driven by the need for reinforcement and from the start the CEG has pressed SGN to take proper account of the uncertainty that exists around, for example, the future sources of heat for new homes. While SGN may be confident through its strong engagement with local authorities that developments will be going ahead, in our view SGN cannot be as confident about whether these will use gas. As such we are pleased that SGN has included volume drivers for spend in this area, which we consider is important in protecting future consumers against funding unnecessary investment.

On the investment in network integrity (and more generally) we note that SGN has carried out CBAs on all projects over £500k, providing a strong evidence base for these projects. Where projects had very long pay-back periods we challenged SGN to be clear why those projects were justified given the uncertainty that exists around the future of gas. There are now many fewer long payback projects. Moreover, we note that many of these projects are named price control deliverables and as such if the evidence changes and they are not progressed then the money will be returned to customers.

Where additional spend is envisaged on safety and reliability, a significant element is looking at new threats in terms of climate adaptation and cyber risk. We are satisfied that SGN is engaging with the right stakeholders to inform its plans in these areas.

On workforce resilience, we consider that SGN has rightly recognised the challenges that it faces and we have pressed the team to engage with a wider set of stakeholders to build diversity in the workforce. SGN is now starting to do this and has a clear plan for how this will be taken forward.

Environmental issues are an area where the CEG has provided significant challenge to SGN. The CEG was aware from its review of the early customer research that environmental issues were of increasing importance for consumers. As a CEG we have also consciously included a "future consumer" view within the group. Given this focus, we had concerns early on that Ofgem's framework was limiting SGN's ambition in this area. In Ofgem's final decision there was a much stronger emphasis on environmental issues and we have continued to press SGN to do more, reflecting the strong support and willingness-to-pay that has come through consistently in their consumer research.

SGN has consistently had a very strong focus on the need to provide evidence to Government on the potential role of hydrogen in heat de-carbonisation. SGN has played a leading role in this and there is very strong stakeholder support for what SGN is doing, including from Scottish government. Not all of this is funded through customers' bills but there is a potential for significant expenditure in this area which, by its nature, is not included in SGN's base totex numbers and the overall bill impact. We would like to see more transparency around how these potential costs might impact on customer bills, including an open discussion with Government and Ofgem on the balance of funding through bills versus

taxation and on whether these costs should be covered by all GB customers, not just SGN customers which is a position we would support. We would like this issue to be explored at the open hearings as a cross-sector issue.

While SGN has a very strong focus on the net zero targets and the pathway for heat de-carbonisation, we initially detected less interest in what could be done to reduce emissions in the GD2 period, notwithstanding that the urgency of tackling climate change was stressed strongly by consumers and in particular future consumers. While SGN has made some very welcome progress on this over the last six months in response to frequent CEG challenge, it remains unclear whether SGN's plans in this area are as ambitious as they might be. However, SGN's proposal to establish an Environmental Steering Group will allow these targets, and progress against them, to continue to be challenged in the light of evolving government policy in this area.

SGN's plan now includes clear actions, including programmes of innovation activity, to tackle leakage and increase the levels of biomethane in the network. These are welcomed. Given the priority attached by customers to tackling leakage, we are keen SGN looks at how to improve measurement and modelling in this area.

The final version of the SGN plan includes a clear commitment to reduce its overall carbon footprint, including leakage, by over 25%. While SGN will be required to track this as part of its formal Environmental Action Plan reporting, we would also like it to be considered formally as a reputational ODI. SGN has further work to do over the coming year to establish a clear set of outcomes-focused metrics for reporting progress on its EAP.

Looking overall at the plan, the bill reduction and associated outputs proposed by SGN are, unsurprisingly, strongly supported by customers as shown through business plan acceptability research. However, we would note that there is potential significant additional spend on innovation and energy system transformation that is not included.

The overall level of productivity that is assumed has increased since the July plan in response to concerns we raised but it remains unclear to us whether this is sufficiently ambitious, particularly when compared to performance in GD1. We hope that the CCG and Ofgem who are able to compare across GDNs and have the resources to drill further into this will provide further challenge in this area.

Similarly, as a CEG we have explicitly not looked at financing issues. We are aware that the cost of capital changes proposed by Ofgem will lead to lower bills for customers in the short term but are concerned if this is simply an inter-generational transfer or if it inhibits necessary investment. We are relying on the CCG and Ofgem to make the necessary judgments in this area, balancing the interests of current and future customers.

Bringing this all together SGN has set out in its Customer Value Proposition (CVP) section how the plan adds value for customers. We remain unclear what Ofgem expects in terms of a CVP and are concerned that the companies will all adopt different approaches to valuation. As such **we would be keen for this issue to explored at the cross-sector open hearing.**

There are no issues that we wish to raise specifically on SGN's plan through the open hearing. SGN has responded well to all the challenges we raised on earlier drafts and as such we consider that this final plan reflects the needs and wants of consumers.

Introduction – the SGN Customer Engagement Group

- > The CEG was set up on a timely basis and in line with the Ofgem guidance.
- > Governance arrangements are in place to ensure the independence of the group.
- SGN has been transparent in providing us with early sight of elements of the plan although the overall timescales of the process have created some challenges.
- > Our feedback has been positively received, including by the SGN board.

CEG structure, approach to appointment, skills mix, confirmation of independence

In setting up the CEG, SGN decided to invite Maxine Frerk to move across from chairing the Stakeholder Advisory Panel (SAP) to chair the CEG to provide continuity and given her strong background at Ofgem in both RIIO and consumer issues. She was interviewed by the SGN independent NEDs and her appointment was then ratified by Ofgem.

At the start of the process it was thought that SGN might wish to develop very separate plans for Scotland and the South and so there was a desire to be able to run in effect separate sub-CEGs if necessary, each with the necessary balance of expertise.

In support of this structure, and to provide a small core team who could help direct the work of the CEG, it was decided (between SGN and the chair) to appoint deputy chairs with strong consumer experience for each of the regions. Role profiles were developed and a recruitment agency was used to ensure the process was independent. Decisions on appointments of the deputy chairs were taken by the CEG chair. Claire Whyley (South) and Lucy McTernan (Scotland) both bring strong consumer experience and through regular communication between CEG meetings have played an invaluable role in helping shape the work of the group.

SGN set out in section 4.5.1 of its plan the process that was then followed for the appointment of the wider panel to ensure independence and a breadth of experience. All members are appointed as individuals and remunerated on a day rate (except where they are employed by a large organisation).

Overall the CEG comprises 17 members – eight each for Scotland and the South plus the chair. This was acknowledged as being a larger group than might be ideal but ensured there was a balanced mix of skills and experience on the group. Within the limitations of needing to have a suitable skill mix the group also provided a good level of diversity (across age and gender in particular).

Having confirmed the appointment of the chair in June 2018, the full CEG was in place by September with the first CEG meeting taking place on 10 September. SGN's support to get the group up and running on a timely basis was appreciated by the chair.

CEG interactions with SGN – how well they engaged with us, timeliness, board interaction

When the CEG was established in September 2018 it was clear that this would be a tight process, reinforced when the Ofgem CCG asked for an initial draft plan to be submitted on 1 July 2019. That said, having early sight of a formal draft plan has certainly helped the CEG to provide more focused challenge.

The plan that was put in place with SGN envisaged four broad phases to the CEG work as set out at section 4.6 of SGN's plan.

Given the volume of work it was agreed that the CEG would meet monthly. Most meetings took place over video link between Edinburgh and Horley although provision was made for three full face-to-face meetings/workshops, including the initial kick off meeting.

Agendas for each meeting were agreed between SGN and the chair with both sides suggesting items for discussion. A forward look was maintained although it did prove difficult at times to get a clear view of when papers might be ready for discussion. Ultimately, with a highly accelerated timeline, the CEG often received papers in the same working paper style that had been used for internal discussions. This transparency was welcomed but it did mean that on occasions the papers were less focused on CEG requirements than they might have been.

For the July plan, the CEG saw a draft version in early June – but without numbers. Again the transparency was welcomed and this approach provided an opportunity for the CEG to have some influence on the July plan.

In terms of timeliness, SGN was generally good (certainly in the early stages) about providing papers a week in advance as agreed. The issue was whether SGN was making enough progress overall against an accelerated timeline. The message from the CEG at the time of the July plan was that there was still a very large amount still to do in terms of engagement, ambition and improving the clarity of the plan. SGN responded by putting in additional resources and, in particular, established a very ambitious programme of engagement through the summer.

In terms of contact with the board, the chair had quarterly catch-ups with Laura Sandys (independent NED), met the board face-to-face on several occasions and also joined the RIIO sub-committee by phone to provide a short update at a number of meetings.

The primary contact for the CEG at SGN executive level is Helen Bray, Director of Stakeholder Relations who attended all meetings (apart from CEG only sessions) and had weekly bilateral calls with the chair planning future agendas and reviewing progress. John Morea (CEO) joined the CEG for specific items on a roughly quarterly basis and Laura Sandys also met with the full CEG. Our sense is that the CEO and board have been genuinely interested in the CEG's view.

CEG ways of working – challenge and questions log, reports, CEG only time, sub-groups

SGN provided the CEG with a secretariat who was an SGN employee but separate from the stakeholder team and who was clear that her role was reporting into the CEG chair not SGN. The fact that she was familiar with SGN helped in following through on actions, for example, and the CEG appreciated the reliable support and help she provided.

Drawing on experience of the water (and aviation) sector the CEG decided to keep a challenge log. However, to avoid this becoming unmanageable the CEG agreed to set a high bar for inclusion of items on the log with a separate questions log used to capture points of clarification or lesser issues.

At the start of 2019, in response to a CEG request, a SharePoint site was set up where all meeting papers, slides and research reports were made available. This also allowed CEG members to work on documents together (for example in preparing this report).

In December 2018, the CEG had an initial CEG-only day to reflect on progress to date at the end of the first phase. This was viewed as a very positive discussion – enabling a more open exchange of views than

had been possible when SGN was present (where the style had tended to be more question and answer). The CEG therefore built in significant CEG only time to the agendas on all meetings (as a minimum at both the start and end), as well as scheduling various sub-group calls. This played an important part in the CEG maintaining its independence through the process.

Sub-groups were set up to allow faster progress to be made on particular topics by those with a particular interest or expertise. Having a variety of different groupings allowed links to be built between the various CEG members, further strengthening its sense of independence. The groups that were formed were:

- The main sub-groups were based around the three output areas with each group led by either the chair or a deputy chair and all members being part of one sub-group based on their interests. These sub-groups often had calls between meetings to reflect on progress;
- Scotland / South some issues were discussed on this smaller group basis as a way to ensure everyone's voice was heard and to allow focus on regional aspects as appropriate;
- Expertise based sub-groups covered the consumer research area and also costs / efficiency through various deep dives.

As well as the challenge log, the CEG provided structured feedback to SGN at key points:

- At the end of the first phase (induction) the CEG set out in a report what it saw as the key issues and questions that it would expect SGN to answer in developing its plan;
- In response to the July plan the CEG produced a short summary of its views which was provided to both the Ofgem CCG and the SGN Board. SGN provided a short response to this confirming how it would take issues forward;
- The CEG also produced a longer chapter by chapter commentary which was made available to SGN at working level;
- In response to the October plan, the CEG again provided some initial views to the CCG and the SGN board and then provided detailed chapter by chapter comments to the SGN team. A first draft of this final report was also prepared based on the October plan and was shared with SGN.

Our sense was that this feedback was seen as very helpful by SGN and in preparing the final report we have revisited these reports as part of the audit trail of how we have influenced SGN's Plan.

Overall, we believe that the above arrangements have enabled us to effectively fulfil Ofgem's ambition that "Being close to a company, but at arms length, these Groups are well placed to identify any disconnect between a good 'sales pitch' and the extent to which proposals genuinely reflect consumers' current and future needs."

Chapter by chapter comments on SGN's Plan

Chapter 1: Introducing SGN

The opening section to SGN's plan introduces the company, its metrics and in particular its distinctive footprint – serving as it does Scotland and the South of England.

This tells a clear story and reflects the explanatory materials developed by the engagement team to clarify what a GDN is in general and tell the unique story of SGN and its current services, for use in different stakeholder and public environments.

The inclusion of 'conversations' with the two operational directors, as well as establishing an engaging personal tone helps to highlight the contrasts between the company's two operating areas. The CEG has been alert to both the challenges and opportunities of SGN's unique footprint and sought to probe whether SGN is fully exploring these in relation to its business planning, considering not just geography and population density, but also the social, economic, cultural and political dimensions to their operating contexts. The increasing divergence in government approach to e.g. zero carbon targets in Scotland (2045) and England (2050) is acknowledged in the introductory section and we welcome the fact that attempts were made in the analysis of all the customer research conducted to contrast the two areas. We have also noted in our engagement with management across the company an implicit understanding of this dichotomy (e.g. *"we can do that in Scotland because the local authorities are supportive"* or *"we can't do that in the South, as we rely much more on contractors"*).

We understand the strategic choice to operate as far as possible as a single entity, with all the financial, systems, and skills transferability benefits that this confers. However, the CEG believes more could have been done to draw out clearly in the body of the plan the opportunities and challenges of working across two jurisdictions and how SGN use this learning to add value in each area. We welcome SGN's commitment in 4.16.4 of the plan to do more in this space going forward.

The introductory section of the plan also refers to company culture. The CEG has noted a tendency for SGN to refer to itself as a 'public service', seemingly distancing itself from a more commercial or corporate portrayal. It is evident to us that a strong public service ethos persists and underpins SGN's approach to customer service. However, the language can cause confusion and some members of the CEG have questioned its appropriateness.

Chapter 2: Track record

Overall, we recognise the strong performance that SGN has delivered in GD1. As SGN highlights, it has led on the stakeholder engagement incentive and on customer service as well as having higher reliability standards than other GDNs. SGN's strategic approach to repex has enabled it to deliver this programme at a much lower cost, delivering strong financial outperformance. It is the only GDN to voluntarily return an additional share of this outperformance to customers.

On environmental performance, we acknowledge the good progress that has been made in reducing leakage, primarily through the repex programme. Similarly on biomethane connections, the positive growth in GD1 is welcomed and we have pressed to see that momentum maintained. However, on the 'Greenplan' we do have a concern that there was no stakeholder visibility of this plan and several of the

targets were missed by a significant margin. It is essential that SGN learns from this and finds ways to build stronger stakeholder engagement around its Environmental Action Plan (EAP).

Chapter 3: Business plan commitment and assurance

The CEG is comfortable that the commitment made in this section to good planning process, assurance and governance is genuine. We have no reason to doubt that both the board and senior executive team have entered into GD2 planning in good faith and seeking best practice.

We appreciated the attendance at one CEG meeting of Independent Non-Executive Director Laura Sandys and the regular interactions between her and the chair and with the board, which provided assurance that CEG views were being considered at all levels of the company. The willingness of senior executives to engage with the CEG has been genuine, they have given considerable time to attendance at our meetings and taken our challenges in good spirit.

We would also like to note with appreciation those operational staff who welcomed us and educated us on our site visits. These opportunities provided important insights into the company and its culture, which have facilitated our work.

The CEG had some concerns that the overall governance framework for the plan was not adequately explained in earlier drafts of the plan, but recognise that this was in large part a timing issue and dependent on the availability of the externally-commissioned assurance. However, we have noted important developments in thinking on executive pay, which we had previously questioned as apparently unconnected to new plan outcomes. This has been rectified, and there is now an explicit commitment (3.1) to align the 'long term incentive plan' appropriately, giving greater weighting to non-financial targets such as environmental, future energy innovation, customer service and resilience, in keeping with stakeholder and customer priorities.

The CEG was briefed on the arrangements for external oversight that were put in place, which we considered appropriate. While we have not sought access to the operational and financial assurance audit reports (not wishing to appear to inexpertly 'second-guess' such authoritative bodies as Arup and Gartner), we do see the PwC work on engagement as more directly relevant to our role and have had late sight of their report. We would also flag that the significant – and very welcome - shifts in emphasis towards environmental and social objectives and metrics during the planning process may require some additional assurance arrangements to be introduced going forward.

Chapter 4a: Enhanced engagement

During the RIIO2 business planning process, SGN has undertaken an extensive and in-depth engagement process with customers and stakeholders in Scotland and the South as set out in its Appendix 4. This built significantly on a developing programme of stakeholder engagement during GD1 and the CEG applauds the effort SGN has made to undertake a huge number of interactions with more than 23,000 customers. The link between this engagement process, the priorities identified for GD2 and the development and refinement of the plan proposals is clear. Throughout our report we draw on the evidence from consumers and stakeholders to underpin our views of how well what SGN is proposing in its plan reflects the needs and wants of consumers.

We note that the levels of plan acceptability (92% in Scotland and 86% in the South) were established using a standard methodology and were higher than the average found in the water industry for their 2019 plans (4.3.4). Similarly, strong results were obtained for affordability and value for money. While very positive, we encourage SGN to reflect further on anything it can do to close the gap between the two regions. We also note that the bill impacts tested excluded the majority of costs for innovation and energy system transformation (given it remains unclear how they will be treated by Ofgem) and hence do not present a complete picture.

We applaud the commitment SGN has shown during the enhanced engagement process to measuring the effectiveness of its activities (4.4.3), following early discussion of the criteria with the CEG, as part of continuous improvement and an ongoing 'professionalisation' of SGN's approach to engagement. The CEG has not considered the independent assurance report provided by PwC but we note that it identified no critical issues and rated the majority of categories as green.

SGN has set out (4.6 and 4.7) how the CEG has contributed to the overall process and we are pleased that SGN recognises the value that we have added. We have set out in the introduction more background on the CEG's ways of working and how we consider we have met the expectations that Ofgem set out. We have also summarised in Appendix 1 the impact that we have had, which reflects and builds on some of the examples that SGN provides in this chapter.

Our overall assessment of SGN's enhanced engagement

SGN's plan has been underpinned by extensive consumer and stakeholder engagement, much of which has been undertaken to a high standard. The CEG considers that overall, SGN has taken a proportionate approach using a mix of approaches including relying more on stakeholder than customer input in some of the more complex areas.

SGN's engagement has covered a wide group of stakeholders and customers across its two regions, including SMEs and good engagement with vulnerable customers. With more time in the overall process and a more strategic approach at the outset, we believe there could have been scope to explore some issues in more depth with customers, to explore more fully the views of large gas users and future consumers, and to establish links with an increasingly wide set of stakeholders. We are pleased that SGN has signalled its intention to continue to build on this strong foundation as it moves into GD2.

Our process for assessing SGN's enhanced engagement

In July 2019, the CEG formally agreed a set of criteria, designed to reflect the minimum standards identified by Ofgem, against which to assess SGN's plan engagement (see Appendix 2). The over-arching criteria we have used are:

- Strategic
- Embedded •
- Clear •
- Comprehensive •
- Timely •
- Targeted

- Robust and appropriate •
- Representative and inclusive
- Proportionate
- Joined-up
- Responsive

The CEG's consumer research experts applied these criteria to each of the pieces of engagement in SGN's insight inventory in order to evaluate the extent to which SGN's GD2 plan proposals are grounded in high quality customer and stakeholder engagement. We then developed an overall assessment of SGN's whole programme of engagement, including their engagement with the CEG, against each of the criteria. The results of this assessment are presented below.

Strategic

During GD1, SGN developed a programme of engagement, including the appointment of the SAP, which provided a strong foundation for its enhanced engagement for GD2. SGN subsequently designed and implemented an intensive and ambitious programme of customer research for GD2, including extended qualitative research on specific

Reflects the company's strategic mission including its geographical regions, and its various network users domestic and industrial.

aspects of the plan and testing of willingness-to-pay, acceptability, affordability and value for money.

In the CEG's view, SGN's GD2 enhanced engagement programme has largely been strategic. The programme has covered both its regions, and regional distinctions have been drawn out in the reports. Both domestic and business customers have been included in the engagement programme, although with a heavier emphasis on domestic than on business customers.

Early in the process, the CEG challenged SGN regarding a lack of planned engagement with large gas users. SGN was a little slow to respond and the engagement that was subsequently undertaken focused mainly on satisfaction and an initial exploration of their current and future needs. SGN also held a webinar on the plan for the Energy Intensive Users Group. However, where SGN talks about customer views on its plan this does not generally include large users. Given that large users represent a significant proportion of the gas carried through SGN's network, we still feel more could have been done in this area but are pleased that SGN recognise this in their plans for GD2 engagement.

Embedded

Ensure the engagement process is embedded across the business, with senior level buyin, not just a standalone business planning/price control review exercise. The importance of engagement is well-recognised within the team responsible for stakeholder engagement and the executive team, including the CEO. This has been clearly evidenced in attendance by staff, including the CEO and members of the executive team at stakeholder events and in engagement between senior staff and the CEG. The majority of SGN staff who have engaged with the CEG have understood the engagement process and demonstrated commitment to it. The CEG has also had the opportunity to discuss the enhanced engagement process and business planning with a

non-executive member of the SGN board, who has shown commitment to ensuring the GD2 plan is representative of customers.

Clear

The CEG's view is that SGN's GD2 engagement has largely been clear on objectives, scope and definitions. We consider that the engagement process made appropriate distinctions between consumer, citizen and community interests, and generally engaged with the right audiences in the right way. SGN

Clear on objectives, scope and definitions.

has a very wide and active network of stakeholders that was utilised effectively, via a range of methods and techniques and, overall, SGN made appropriate decisions about when to engage with stakeholders rather than directly with customers. On occasion, as the planning process progressed, the CEG encouraged SGN to be more selective in prioritising specific issues for engagement with customers, to allow for more in-depth discussion. SGN responded to these suggestions in relation to the phase three customer workshops, and we consider this to have considerably improved the format of and the outcomes from the workshops.

Comprehensive

Considers consumer and stakeholder views across the full range of topics and on all aspects of the plan, rather than predetermining their priorities or seeking to endorse businesses priorities. SGN's enhanced engagement process has covered a wide range of issues and we have seen several instances where engagement has genuinely shaped plan proposals. We note SGN's open approach to stakeholder engagement, beginning the process early and implementing a phased process that enabled customers and stakeholders to influence the overall priorities at the outset.

Stakeholder engagement has typically been used to explore some of the more complex, long-term and/or strategic issues in place of direct customer engagement. This has generally reflected CEG advice, given

the time available. In our view, SGN had less experience of commissioning customer research at the start of the process. This developed over time and we note that SGN has identified building capacity among customers as part of its plans for enhanced engagement during GD2. This should pave the way for customers to influence more complex and strategic decision-making going forward. We see potential for the Customer Panel to have a role here, provided it is developed and supported appropriately.

The CEG also noted that some of SGN's more inward-facing business decisions – e.g. workforce planning and future energy system asset stranding risk – were not exposed to external engagement until fairly late in the process, in spite of ongoing challenge by the CEG.

The CEG has been provided with updates on engagement at most CEG meetings. However, advance engagement with the CEG on some of the research during the latter phases was patchy as a result of increasingly tight timescales. The CEG also had little input to the design of SGN's stakeholder engagement although members were invited to various events as stakeholders and we acknowledge above that these were generally very well designed.

Timely and responsive

Overall, the CEG's view is that SGN has completed a detailed enhanced engagement programme within the timescale that was available. We note that while SGN began its engagement early, it could only start the process of testing specific proposals once the plan itself was sufficiently developed in July. Moreover, the CEG signalled in its feedback on the July plan that the research conducted up to that point did not provide sufficient evidence to support SGN's proposals. Phases three and four, built on the earlier research and improved on earlier shortcomings but as a result, they involved a much heavier volume of work than anticipated, often implemented at short notice, with fieldwork still

Thorough planning of the engagement programme and individual projects allowing engagement at appropriate stages. Sufficient time needs to be allowed at each stage of engagement.

Recognise that ever- changing and evolving consumer wants/needs will mean that engagement will need to be revisited over time, provide ongoing feedback and demonstrate impact.

ongoing in November 2019. We did not see the findings from the final acceptability testing until just before the December plan was published.

To some extent, this reflects a responsive approach to engagement and a willingness to adapt plans to fill gaps and follow up complex issues. In some cases though, for example in relation to the research with large gas users that took place in the summer, we believe better planning would have enabled this to be covered in a more timely manner. As noted above, on occasion the high volume of work conducted to tight timescales compromised the CEG's ability to input and reflect properly on the results of the engagement.

Robust and appropriate

Well-designed and executed to a high standard, using valid methods that are appropriate to the audience and research questions. SGN's engagement with stakeholders has been well designed, built on best practice, and conducted to a high standard, using high quality delivery partners, where appropriate.

In the customer research, across the different phases, SGN has made appropriate use of exploratory workshops, Max Diff analysis, willingness-topay research, more in-depth qualitative research and acceptability testing. When carrying out quantitative research it has used cognitive testing of

scripts to ensure the questions are clear.

It has been evident, however, that SGN has historically had less experience in relation to customer research and the CEG has raised some specific concerns during the process centering on:

- Procurement: The CEG felt that some of the tenders issued to research agencies were at too high a level, lacked clear information on the aims and objectives of the research and were issued to a relatively small pool of agencies.
- Timing: On occasion, the timing of the commissioning also undermined the quality of the process, occurring either very early, before the purpose of the research had been fully thought out, or with too little time to develop a clear brief or seek input from the CEG.
- Use of deliberative techniques: There has been a lack of high-quality deliberative research where customers are given an opportunity to fully understand and explore the evidence, reasoning and trade-offs around business decisions.

Because of the perceived need to have statistically robust results to feed into the regulatory process SGN has also tested some quite complex issues (such as % mix of hydrogen in the grid) through quantitative willingness-to-pay surveys. The CEG has been cautious about over-reliance on these results but consider that the way that SGN has actually used that evidence, providing further support on prioritisation, is appropriate.

Representative and inclusive

SGN has worked hard to ensure that its engagement process is representative of its customer base and has achieved this to a high standard in relation to domestic customers. In phase one, SGN commissioned research to identify the characteristics of customer groups that are less likely to be represented in customer research and commissioned high-quality bespoke qualitative research with hard-to-reach customers, using trusted intermediaries to facilitate participation. In subsequent phases, SGN has supplemented its online research with additional faceto-face interviews with vulnerable customers.

SGN's research has also consistently included "future consumers" (typically defined for research purposes as those aged 18-24) and we applaud SGN's intentions in trying to establish the interests of this group that is a notoriously hard concept to deal with. As a CEG, we encouraged SGN to consider both consumer research results and to engage expert stakeholders on long-term issues

Ensure engagement covers all the different consumer segments affected by decisions e.g. potential current consumers, vulnerable and hard to reach consumers as well as future consumers.

Ensure all consumer and stakeholder groups experience equality of opportunity in participating in engagement, and that methods are designed and executed in a way that ensures that all consumers' views are included.

that affect future consumers, specifically the de-carbonisation of heat and related stranding risk. We were happy to see SGN following this advice.

However, we believe there are some questions on which SGN could have sought future consumers' views more directly. In May, we challenged SGN that we thought there were several issues where young consumers' views were particularly salient, notably perceptions of asset stranding risk and principles of intergenerational fairness. While complex issues, these could have been explored with young / future consumers through appropriate deliberative research. We note that SGN addressed issues of cost sharing between current and future consumers in qualitative research conducted in the summer, but in our view this research did not fully address the challenge raised. To bring in the views of under 18s we

had also suggested linking up with Young Scot (a charity working with 11-26 year-olds) which SGN did follow-up, but there was not enough time to progress. We are pleased to see that SGN has identified such complex long-term issues as equity, stranding and the future of energy as a focus for its ongoing enhanced engagement during GD2.

We do not yet have sufficient understanding of the range of perspectives of SME customers to know whether engagement with them has been representative. We are, therefore, pleased to see this group identified as a priority for SGN's GD2 enhanced engagement.

Proportionate

Use of resources needs to reflect the benefit to consumers and stakeholders. SGN has clearly invested significantly in its enhanced engagement for GD2 and overall, we believe this has been proportionate to the outcomes delivered. It has undertaken a significant amount of research and engagement and much of this engagement has been designed, facilitated

and delivered by external partners with relevant expertise. SGN staff, including at senior level, have been well-represented at stakeholder events, participating in group discussions, taking notes and answering questions. We are not clear whether SGN undertook a systematic assessment at the outset of spend against impact/benefits, but SGN did begin doing this early on in the process in order to apply learning to future engagement. As noted above however, we think that some of the customer research in early 2019 did not deliver good value in terms of the quality of the research delivered.

Targeted

During its enhanced engagement process, SGN utilised a wide range of communication channels, designed to inform, explain, listen, explore, test and feed back on key areas of the plan. This included a number of research exercises, using various methods, throughout the process. A large number of stakeholder events were held in both Scotland and the South, aimed at a range of audiences, including highly specialist ones. In our view, the channels and methods of communication used to promote these

Using a variety of communication channels, targeted to different groups of customers and stakeholders.

activities, and to facilitate engagement during the activities, have been appropriately targeted to the audience in question.

Joined-up

Ensure that participation, research and engagement methods are not treated in isolation and that one informs another. SGN has worked hard during its GD2 planning process to ensure that the many different strands of engagement have been used iteratively to refine understanding of the issues. SGN has shared insight from its engagement and its thinking on business planning openly with the CEG, stakeholders and customers where this has been appropriate. The CEG applauds SGN's commitment to keeping the engagement process joined-

up and believes that has added considerable value.

Chapter 4b: Engagement in GD2

As noted above, SGN has made significant progress both in its approach to stakeholder engagement and its use of insights gained from engagement since the start of GD1. This progress is clearly reflected in SGN's current position as the highest ranked gas network in Ofgem's stakeholder engagement incentive, having ranked lowest at the start of GD1. We recognise SGN's ambition to continue this journey, drawing on best practice and learning from GD1 (4.10) and have endorsed their principles of engagement for GD2 (4.11).

We are satisfied that SGN has developed a clear understanding of domestic customers' priorities for GD2, from engagement conducted to date, and we applaud the proposed emphasis on engagement with business customers (and especially industrial users) during GD2. We encourage SGN to build on its engagement with its SME customers in order to fully understand the diversity within this group.

We are also pleased to see a specific focus on future consumers and we encourage SGN to focus systematically on this group in order to inform trade-offs between current and future customers, and influence thinking in relation to specific long-term and complex challenges.

We are especially pleased to see a commitment to ongoing engagement that builds capacity amongst its stakeholders, where SGN already has a strong track record, and we applaud the commitment to similar engagement with customers. The Customer Panel, if used and developed in the right way, has real potential here.

As part of keeping abreast of changing stakeholder and customer priorities the CEG also encourages SGN to regularly interrogate its list of stakeholders to identify and fill gaps; to explore ways to facilitate engagement by stakeholders who are less active and, if appropriate, to undertake outreach activities with stakeholders who are unable to participate in formal events. The CEG encourages SGN to share learning between Scotland and the South and, in particular, to transfer good practice and knowledge gained from each area, across all areas of engagement, not just fuel poverty (4.16.4).

The CEG was consulted by SGN on its six-stage delivery cycle (4.17) which will be used to develop the engagement plan and we are supportive of this approach

Proactive engagement as part of day-to-day business (4.14)

SGN has identified a number of performance commitments against which its engagement around business as usual activities will be measured. We welcome this systematic approach and believe the performance commitments to be a good reflection of the feedback SGN has received from customers and stakeholders. Following the October plan draft, the CEG shared a concern with SGN that some of the measures were focused more on activity than on outcomes and impact. We are pleased to see that SGN, in response to our feedback, has included a link with satisfaction scores on communication and planned works in the measures for PC3 and PC4, which will provide a measure of effectiveness and impact.

Engagement to find solutions to complex challenges (4.15)

We are delighted to see SGN's plans to focus its engagement during GD2 on working collaboratively to address some of the complex long-term challenges facing the network. We recognise that the suggested challenges and the greater emphasis given to 'creating a shared net zero future' and 'making a positive impact' are grounded in feedback received from customers. We are very supportive of SGN's proposal

for regular independent review of progress on the ten challenges by a relevant expert interest group, to take account of the changing external environment, and view this as a good example of accountability and transparency in an area where meaningful performance measures are difficult to identify. The CEG supports SGN's proposal that this performance commitment should be a bespoke output for the reputational stakeholder engagement incentive.

Ongoing role for the CEG (4.17.2)

SGN has proposed an ongoing role for the CEG in assuring the performance commitments and proposed outputs, and in supporting an assessment of SGN's performance as part of the reputational ODI for stakeholder engagement. We are pleased to see that SGN has accepted our suggestion that the CEG should comprise a smaller core group of members, although we see potential for an on-going role for a less active, wider membership who are able to contribute expertise on key issues and attend local stakeholder events where appropriate. As SGN acknowledges however, it remains important for the smaller core group of CEG members to maintain a regional mix and key areas of expertise.

In terms of the future role of the CEG we note a number of areas in which we hope SGN would want to continue to benefit from members' input including:

- In 2020, following submission of the plan and the start of GD2 to participate in the open hearings, if appropriate, and oversee refinements to the plan;
- As an ongoing sounding board for SGN given the high degree of policy uncertainty in key policy areas, and different approaches in Scotland and the South;
- To input to SGN's framework for measuring the outcomes from its engagement;
- As part of the independent expert groups reviewing progress against the complex challenges, where members can offer particular expertise;
- To promote ongoing engagement and learning from other CEGs.

We also agree that there is a role that could be undertaken collectively by the CEGs overseeing a common, industry-wide measurement framework on key outcomes, including, in our view, around vulnerability or the EAPs.

We agree with SGN that the CEG and the SAP must be distinct from, but add value to, each other. In this context, we recommend a review of the Terms of Reference for each group to ensure their work is targeted and complementary. From our perspective, the key distinction is that the CEG would provide arms-length oversight of SGN's performance against the plan, leaving the SAP to focus more on influencing SGN's delivery of the plan.

Effectiveness (4.17) and cost-efficiency (4.18) of engagement

We welcome SGN's openness to ongoing measurement of the effectiveness of its engagement and support the target of achieving a 10% improvement in stakeholder satisfaction scores by the end of GD2. We are particularly supportive of SGN's efforts to measure the effectiveness of outcomes from engagement using the social value bank it is developing.

We welcome SGN's commitment to delivering value for money in the context of its spending on engagement and note SGN's calculation of the financial (£7.7m) and social (£19.2m) benefits that are delivered as a result of its £2m spend on engagement.

Chapter 5: Customer Value Proposition

As a CEG we do not feel that we yet have a clear understanding of what Ofgem is expecting in terms of a Customer Value Proposition (CVP), notwithstanding the latest update to the plan guidance. As such we have found it hard to provide appropriate challenge to SGN in this area. In our early discussion with them we counselled against simply focusing on what was easily measurable and suggested SGN try to distil out what the story was in terms of where they were adding value for consumers over and above business as usual, even if it could not be quantified. SGN has heeded that advice but it remains unclear to us whether that delivers what Ofgem is looking for.

As a CEG we are supportive of all the elements that SGN has identified in its CVP, which have been informed by the enhanced engagement process of developing the overall plan.

In terms of the methodology used by SGN for quantifying the CVP this clearly varies across different elements, as set out in Appendix 5a which clearly articulates the value SGN is adding.

We have been very supportive as a CEG of SGN's efforts to use the methodology of "social value" to understand the wider societal value of what they do, which we see as best practice across government and more widely. However, we have noted that in Ofgem's report on the stakeholder engagement incentive for this year that they raise concerns about SGN's use of both social return on investment and willingness-to-pay as ways of quantifying benefits. We are unclear what their specific concerns are but believe that social value is an appropriate methodology to use in the context of the CVP.

We share Ofgem's concerns around over-reliance on willingness-to-pay, particularly for more complex areas outside customers' day-to-day experience. However, we expect this to be used widely by the networks in the absence of any other obvious methodology for assessing their added value. We note that SGN has sought to take a conservative approach in so doing.

Similarly, we note that SGN is not claiming the full benefit for initiatives like GSMR which may progress anyway (but where SGN is playing a leading role). However, the appropriate level of deadweight loss is a difficult call to make.

Overall, we are concerned that the CVP process risks becoming about finding clever ways to quantify things rather than a focus on what the plan really delivers for consumers.

Given these concerns, this is an area we would like to see explored through the open hearings process, once all company plans are in the public domain. We are concerned that without some sort of additional step like this Ofgem will find it hard to compare what are likely to be very different approaches and our own assessment of SGN's CVP is currently hampered by the lack of comparators against which to judge what good looks like.

Chapter 6: Making a positive impact

- SGN's proposals are based on extensive customer and stakeholder engagement and involved specialist stakeholders in developing its vulnerability framework.
- The plan reflects an appropriate level of ambition on customer service given a clear steer from customers that this was not a priority for investment.
- > Its FPNES targets show ambition and we welcome the proposal to keep them under review.
- > Creation of a steering group for vulnerability and CO will provide valuable oversight.
- > The CEG supports the proposed social value collaboration incentive as using a best practice approach to valuation and responding to a clear area of customer concern.

SGN's engagement on customer service proposals and outputs

In developing its plans for customer service in GD2, SGN starts from a strong position, especially in Scotland. During GD1, SGN improved its ranking on customer satisfaction in Scotland, moving from third at the start of GD1 to first for the last two years. The picture is slightly less positive in the South although performance here has also been improving. At the end of 2018/19, customer satisfaction was 9.24 in Scotland and 8.98 in the South. We note a similarly strong GD1 performance on complaint-handling, with a large and continuing reduction in the volume of complaints, and a welcome increase in the scale of SGN's support for vulnerable customers.

Against this backdrop, SGN has conducted a fairly intensive and ongoing programme of engagement around how it can achieve a positive impact for customers as set out in its plan.

We note SGN's efforts to include both vulnerable and hard-to-reach customers in this engagement, undertaking bespoke research and working with trusted intermediaries. While the number of hard-to-reach customers is small, the engagement was in-depth and the sample was designed to provide a range of views, with potential to inform SGN's thinking about other hard-to-reach customer groups. Customer engagement routinely included sub-samples of SMEs and future consumers, and the views of these groups were analysed and reported separately where they diverged from the wider customer views, along with other socio-demographic breakdowns.

The proposals and outputs in this chapter have also been informed by in-depth stakeholder engagement throughout the planning process, including six Moving Forward Together (MFT) events in Scotland and the South and three subject-specific specialist panels focusing on supporting communities, supporting customers at risk and fuel poverty.

The CEG commends the way that insights from customer and stakeholder engagement have been used to shape and refine the plan. We note SGN's commitment to exploring these issues with both customers and stakeholders throughout the engagement process and have observed SGN responding to the feedback it received, welcoming challenge and amending aspects of the vulnerability framework and adjusting its FPNES targets following detailed stakeholder input during the specialist panels.

Overall, customer feedback supported maintaining the strong levels of customer service and did not generally see this as a priority for investment, albeit customers in the South placed a somewhat higher priority on it. However, SGN has found that, across the majority of domestic customers, there is a strong willingness-to-pay for initiatives to support vulnerable customers. That said, we are aware that those on low incomes are less willing (or able) to pay more and that businesses were more likely to see this as a

responsibility for government. Balancing these different interests SGN's proposed level of spend in this area seems proportionate.

SGN also explored ideas such as the use of appointments for purge and relight following an outage but the cross GDN work showed that among those who had experienced an outage only 15% wanted a timed appointment. We therefore support SGN's decision not to progress this as a specific output but to focus on the ultimate outcome of customer satisfaction.

In terms of their own customer service experience SMEs are a diverse group who will be impacted in different ways by interruptions and disruption and it is likely that many of these customers will be vulnerable in ways that are not drawn out in the plan. SGN's commitment to look to understand the position of these customers better in GD2 is welcomed.

In terms of engagement with larger users SGN, at the CEG's suggestion, did undertake research with companies seeking connections where satisfaction was comparatively poor. This highlighted a number of areas for improvement which SGN has committed to implementing straight away rather than waiting for GD2.

Making a positive impact: SGN's commitments

SGN makes two key commitments to customers:

- To help 250,000 vulnerable customers to use energy safely, efficiently and affordably;
- To provide a great service to customers, scoring above 9 out of 10 every year in both regions.

The CEG supports these proposals and views them as both driven by and reflective of the evidence gathered during enhanced engagement.

As a group, we have debated whether we believe this customer proposition is sufficiently ambitious and stretching to ensure that SGN continues to deliver strong performance in customer service. Our conclusion is that, given a clear steer from customers not to invest further in general customer service improvements and to prioritise support for vulnerable customers, SGN's plan reflects an appropriate level of ambition with regard to customer service and a notable level of ambition to address vulnerability. The 9 out of 10 target is discussed further below.

The most ambitious proposals are in relation to FPNES targets and helping vulnerable customers on which SGN has undertaken considerable in-depth engagement with both customers and specialist stakeholders. These proposals have been refined and developed in response to this engagement, most notably in relation to the FPNES targets and a major re-working of the "pyramid" of support for vulnerable customers. We welcome the commitment SGN has shown to use the additional funding available for supporting vulnerable domestic customers to build on the GD1 achievements and contribute to good practice across the sector.

As such, we are supportive of SGN's decision not to propose additional outputs or incentives for customer service and applaud its recognition of and attempts to measure its wider social impact, which is an area both customers and stakeholders highlighted as important. We also applaud the commitment SGN has shown to keep its plans and targets under review and exposed to oversight by specialist stakeholders to ensure that they remain appropriate and impactful.

Minimum standards for vulnerable services: licence obligations (6.2) and GSOPs (6.3)

The CEG welcomes SGN's commitment to incorporate a high level of ongoing support for vulnerable domestic customers as business as usual (para 6.2) and recognise the stakeholder input that has been utilised to develop and refine these practices. We are pleased to note that these activities conform to the British Standards Institutions standard for vulnerability.

We are very supportive of SGN's plans to automate compensation payments in the event of failure to meet GSOP3 (para 6.3) and GSOP13 (para 6.12). We recognise and support the input SGN received from stakeholders around the benefit of a flexible, needs-based approach to minimum standards for vulnerable services and therefore, agree that this is a more effective approach than an enhanced GSOP. We are pleased to note that SGN is feeding this insight into ongoing discussion with Ofgem regarding the value of an additional GSOP in this area.

Fuel poor network extension scheme (FPNES) (6.4)

We welcome the process that SGN has undertaken to test and refine its proposals on the FPNES. Taking the maximum number of customers that could be helped as its starting point, an approach suggested by stakeholders, reflects SGN's ambition in this area. SGN's engagement on the targets has demonstrated an openness to challenge.

We note that SGN increased its initially very low targets following Ofgem's decision not to apply penalties for failure to achieve targets and the targets that were tested with the specialist stakeholder panels during the summer of 2019 were 13,150 in Scotland and 4,742 in the South. Stakeholders were largely supportive of SGN's methodology for defining the targets but felt it was too ambitious in Scotland and not ambitious enough in the South. Targets have subsequently been revised to 13,000 in Scotland and 5,000 in the South.

The CEG's view is that the current targets reflect a notable level of ambition, especially in Scotland where the environment is most favourable for the delivery of network extensions and where SGN has accepted the risks attached to over-ambition in recognition of the importance of the issue. Given that delivery of the network extensions is closely tied into government targets and programmes around fuel poverty, and in particular funding of the in-home measures, we strongly support the commitment to ongoing dialogue with expert stakeholders to ensure targets remain appropriate once the current policy uncertainties are resolved.

The CEG welcomes SGN's work with the Energy Savings Trust to build a mapping tool based on detailed small area datasets and see great potential for this to inform the work of other gas networks and partner organisations, as well SGN's own activities. We are also pleased to see SGN's proposal to continue a multi-agency approach to delivery and note that establishing strong delivery partnerships will be of particular importance in the South where the policy landscape is less favourable.

We especially welcome SGN's commitment to working with stakeholders on the complex challenge of 'finding alternative heat solutions for fuel poor households', which was identified by the CEG as a key element of addressing fuel poverty in the context of de-carbonisation.

Vulnerable service provision: use-it-or-lose-it allowance (6.5)

The CEG notes the programme of engagement that SGN has undertaken to co-create and refine its proposition on services for vulnerable customers funded via the use-it-or-lose-it allowance (para 6.5).

SGN has responded to feedback from stakeholders, customers and the CEG that these services must deliver measurable and meaningful impact and has, as a result, halved its original target of helping 100,000 customers per year during GD2. The CEG welcomes this change, noting that customers were supportive of initiatives aimed at providing more in-depth support to a smaller number of customers. This was reflected in the significant changes that SGN made to its vulnerability pyramid following the specialist stakeholder panel discussions and picking up on the proposals put forward subsequently by a small group of experts. We note that the total number of people receiving Tier 1 support remains relatively small at 1,500 people per year and felt, initially, that this may not be fully reflective of customers' view that SGN should prioritise in-depth support more strongly. We recognise, though, that customers receiving Tier 1 and Tier 2 support will need to be identified through the triage, identification and support provided at Tier 3, necessitating a continued commitment to providing that wider support.

Carbon monoxide awareness and advice

We note that SGN is provisionally proposing to ringfence around £200k from the use-it-or-lose-it allowance for carbon monoxide awareness work, reflecting more mixed feedback from stakeholders on the value of this work compared with wider support for vulnerable customers, but is intending to keep this amount under review. The CEG welcomes the flexibility of this approach. We support the five issues and potential solutions, identified with stakeholders, in SGN's 2018 Carbon Monoxide Strategy and welcome the proposal to maintain a 'rolling review' of emerging issues.

Assessing anticipated outcomes and value for money

In light of the value placed by customers on support for vulnerable people and the strong steer from both customers and stakeholders that this support needs to be used efficiently and to achieve impact, we welcome SGN's use of its evaluation framework from GD1 to produce evidence-driven estimates of likely outcomes from activities funded by the use-it-or-lose-it allowance.

It is clear to the CEG that SGN has taken note of a fairly strong expression of willingness to pay for supporting services for vulnerable people. The proposed approach, taking into account the business-as-usual activities as well as the activities funded by the use-it-or-lose-it allowance, reflects this desire. We also applaud SGN's attempts to measure the value provided by these activities and the target it has set itself, of delivering £3.3m of direct financial benefits in each year of GD2.

Delivering target outcomes

The Steering Group for Vulnerability and CO has potential to add real value to SGN's delivery of support to vulnerable customers and we welcome SGN's commitment to ongoing oversight and scrutiny, as part of the governance around the use-it-or-lose-it funding. We welcome the suggested principles which have been tested with stakeholders and the proposed use of an established decision-making tool to assess potential activities. We are pleased to see that SGN has agreed to our suggestion that the steering group should receive direct customer input.

Collaboration with other networks

Throughout the engagement process, both customers and stakeholder input emphasised the importance of SGN working collaboratively with other organisations to maximise the value of its spending and activities on vulnerability. We welcome, therefore, SGN's commitment to collaboration and partnership-working including the establishment of a cross-GDN group to progress collaborative proposals.

Vulnerable service provision: innovation (6.6) - see chapter 13

Consumer vulnerability reputational incentive (6.7)

We welcome SGN's commitment to cross-sectoral work on vulnerability and we see value in an annual showcase event, to share knowledge and learning in order to facilitate replication and standardisation across the sector. We welcome SGN's suggestion that CEG members could be involved in a steering group to ensure a high standard of best practice sharing and challenge. We note SGN's commitment to common performance metrics and welcome its recognition of feedback from the CEG and SAP that, to be meaningful, these must be outcome-focused. We see considerable potential for an industry-wide framework for the measurement of social value here and welcome SGN's leadership on this

Stakeholder engagement reputational incentive (6.8)

We welcome SGN's proposed bespoke output relating to additional engagement around complex challenges for the business and believe this has potential to add considerable value to SGN and the industry, as well as building capacity in stakeholders. We note the proposal for the CEG to oversee the mid-point review of progress on the challenges and we welcome this role. We also see potential for CEG members to be part of the expert interest groups for each challenge where they have specific expertise, to ensure that the customer viewpoint is represented.

Emergency response time (6.9) - see chapter 7

Customer satisfaction (6.10)

Following the July version of the plan, SGN was challenged by the CEG on whether the 9 out of 10 target it had set for customer satisfaction was sufficiently ambitious – especially given that it already achieves satisfaction levels above 9 out of 10 in Scotland. We recognise that SGN has undertaken detailed engagement on this, with both customers and stakeholders. We also acknowledge that evolving customer expectations mean that meeting a target of 9 out of 10 will require continued effort, a point that was also made by both stakeholders and customers. In qualitative workshops, customers were clear that they did not want SGN to 'stand still' on customer service, and in the South customers were very clear that they wanted to see SGN make a concerted effort to close the gap in satisfaction scores between Scotland and the South. We are pleased to see that in the final plan SGN has committed to *exceeding* 9 out of 10 on customer service in each region over GD2 and note that feedback from customers and stakeholders suggests that this approach 'seems about right'.

We recognise that the priority areas SGN has identified for action in GD2 - improved communication, certainty on timescales and quality of service - are informed and underpinned by its ongoing contact with customers. Following the publication of the October plan draft, the CEG asked SGN to provide

further detail on how it would improve these areas. We are pleased to see more detail in the plan and supporting Appendix but remain unclear how well developed or deliverable their proposals are. We trust that as it moves forward to implementation SGN will set more specific targets in each of these areas to enable progress to be tracked.

We remain supportive of SGN's agile approach to developing improved customer service. We also welcome SGN's commitment to retain more traditional methods of customer contact while concurrently developing more innovative approaches. While new technology or new approaches to customer contact may have associated costs, there can also be efficiencies (e.g. through reduced call centre staff) that we would expect to be passed on to customers.

Complaints metric (6.11)

We welcome the focus not just on effective handling of complaints but addressing the underlying causes. The evidence of unsolicited thank-you notes exceeding complaint volumes around planned works is a strong example of how this can work in practice.

Average restoration time for unplanned interruptions (6.13)

The CEG recognises that SGN has exposed its proposed target for average restoration time following an unplanned interruption to considerable scrutiny from customers and stakeholders. The plan is transparent that stakeholders were not wholly in agreement on whether the proposed target was challenging enough. Following robust discussion with SGN on this issue, including the provision of additional supporting information, the CEG is supportive of this target. We are also in agreement with stakeholders that, at the margin, customer experience during an interruption is more important than its duration. That said the CEG would still like to see SGN commit to narrowing the gap between Scotland and the South in restoration times, reflecting feedback from customers in the South.

Social value collaboration incentive (6.14)

The CEG welcomes the work that SGN has undertaken to develop its social value collaboration incentive, facilitating expert discussion, co-creation and cross-sector learning including an excellent specialist roundtable chaired by Hazel Blears MP. We note that SGN has set itself a high standard for this work and we applaud this ambition to be a sector leader, seeking to adopt and adapt the best in other industries and the public and voluntary sectors. We recognise distinct positive potential outcomes from this work: the wider adoption of social valuation techniques throughout the company and beyond; collaborative approaches becoming a standard, not a 'nice to have' for new projects; and specific wellbeing outcomes for customers in the demonstration project period and going forward. The CEG has noted strong support for social valuation at stakeholder engagement events and for collaborative approaches in customer research exercises - and naturally supports any attempts to reduce negative impacts on communities.

In terms of the specific incentive design the CEG considers that SGN has set out clearly how this would be measured, the basis for the target and the design of the incentive. The design of the incentive was informed by willingness-to-pay research around disruption as well as what appears to be robust statistical analysis of ONS data on life satisfaction, drawing on best practice, including water company experience. SGN has talked the CEG through the detail of its proposed incentive which has our full support.

Other bespoke incentives (6.15)

We support the decision to drop the other potential bespoke incentives that were proposed in the July plan draft given the lack of time to work up robust proposals. We would, however, encourage SGN to continue to develop its thinking in these areas, for example through innovation projects, if it believes it can deliver consumer/system benefits.

Chapter 7: Delivering a safe and efficient service

- SGN's thinking reflects the priorities of stakeholders and customers who want to see current levels of safety and reliability maintained but are not looking for improvements.
- Acceleration of the repex programme will deliver operational and carbon benefits and has strong stakeholder and customer support.
- > Project proposals are well supported by CBAs and engineering justifications.

The CEG sub-group devoted to safety and resilience matters, has scrutinised this chapter of the plan, and the associated appendices on repex, transmission integrity, distribution integrity and emergency. We have also sought to understand the flow-through of the strategic narrative in this chapter, to the much more detailed coverage of workload and proposed projects and programmes laid out in chapter 17. Our sub-group was fortunate to count amongst its number members with career-expertise in gas engineering and the management of other utilities. Without this, and the patient explanations by the SGN team, dealing with such technical complexity might have been quite daunting.

We are comfortable and confident that SGN's thinking around these issues has reflected the overarching priorities consistently expressed by stakeholders and in customer research around reliability, safety and efficiency. While safety is considered very important customers do not see a need for investment to improve performance in this area and generally want costs brought down. The so-called '4Rs' approach to only replace or rebuild assets that cannot be repaired or refurbished has largely been welcomed as a common-sense approach to maintaining an ageing network with an uncertain future. However, we have also noted the evident tensions in this process as the company has sought to balance the short-term and long-term, and trade-offs with other priorities discussed elsewhere in the plan around whole systems thinking, reducing environmental impact, and innovating for the future.

As such we took a particular interest in the extended qualitative research exercises that came later in the process and saw stakeholders grapple with the same dilemmas. This was no doubt challenging but nevertheless produced a clear steer that other, non-financial, factors were important to them, alongside the obvious bill impacts.

We also considered whether and, if so, how bespoke outputs in this area might be evidenced or justified through consumer and stakeholder engagement and concluded that often it was unreasonable to expect extensive engagement on the merits of individual projects, where the decisions were specialist in nature, requiring expert engineering judgment. As such, we largely pressed SGN on its evaluation tools including the use of cost benefit analysis (CBA) and monetised risk (NARMs). In the case of the former, our view is that CBA practice and thinking is well embedded in the company and flows through the planning process. The NARMs methodology however is less well developed and the sub-group worried that applied unthinkingly it could have adverse outcomes. However, we were reassured that expert judgement still played an important role where safety was at stake. We also noted examples in the detailed project plan and appendices (e.g. in relation to responsible demolition and decommissioning of redundant assets), of good local stakeholder and public engagement on the approach to be taken on projects.

Repex

The question of how in GD2 SGN approach repex – investment in replacing old iron and steel pipes in the network with modern plastic – was for the CEG a significant ongoing debate and ultimately became a litmus test for the whole process of stakeholder and customer engagement and its impact on planning.

At a very early stage in the process CEG members witnessed some excellent engagement on the subject as participants in stakeholder workshops. Well-designed materials were provided, such as case study local area maps with the pipes of different types marked out to demonstrate the impact and relative timing of roadworks, against an information backdrop of the cost implications in the short and longer term. These gave participants an opportunity to grapple with the planning questions the SGN managers were considering from a real-life perspective.

Pressed subsequently, the SGN senior engineers who participated in these workshops voiced their appreciation of the fresh perspective it brought to their professional consideration. They also expressed not a little surprise at some of the outcomes, including a preference where possible to accelerate the repex programme to reduce disruption and for 'common sense' reasons, as well as to address some of the management concerns about e.g. availability of contracted workforce in the latter stages of a 'flat profile' workplan. The CEG noted this and welcomed the inclusion of an accelerated repex programme in its feedback on the first, July version of the plan.

It was therefore with some surprise that the CEG came to understand in the summer that SGN was intending to remove the accelerated repex, reverting to a plan that undertook the work evenly over the full period allowed by the HSE - ostensibly in response to CEG comments about the potential scale of additional safety related spend. This prompted a high-level challenge to the team to re-consider in the light of stakeholder and customer views. Moreover, stakeholder events and customer research in the summer focusing on environmental impact gave a clear message that SGN should prioritise reducing leakage with repex having a central role.

Ultimately, SGN reintroduced the accelerated programme for the GD2 period (7.5.1), which the CEG welcomes in and of itself, but also as an indicator of SGN's willingness to listen and respond to challenge.

Similarly, the CEG support a proactive approach to replacement of steel mains and risers (7.5.2), building on the cross-industry work feeding into the HSE.

Record-keeping – multi-occupancy buildings (MOBs) (7.5.7-7.5.9)

SGN appears to have a good understanding of its assets and a proactive approach to record-keeping. However, in the light of Grenfell there was clear customer support (evidenced in the asset maintenance appendix) for action to ensure safety around high-rise buildings and the CEG supports the inclusion of a programme of inspections for high and medium-rise buildings. The idea of installing methane detectors and remote valves in MOBs has been dropped on cost grounds. The CEG note that SGN consulted with stakeholders before taking that decision.

Transmission and distribution integrity

The CEG took the view that plans in relation to transmission integrity were well worked up and defined at a relatively early stage with a well-defined appendix supporting the July plan. On distribution integrity

the sub-group has noted a clear development in the structure, layout, content and level of detail from the July plan. Greater detail on the GD2 activity breakdown including engineering justification papers (EJPs) and CBAs (on all projects over £500k rather than the £2m mandated by Ofgem) has given the CEG a level of confidence the projects are sound and there is good evidence of customer/stakeholder input.

Emergency services (17.4 and appendix)

The CEG has noted the performance standards assumed within the emergency services activity, driven by legal requirements and maintaining customer satisfaction levels. As noted above, while safety is a clear priority for customers, they do not support any additional investment to improve the service levels. The CEG notes SGN's strong performance on emergency response time in GD1 and its commitment (at 6.11) to continue to deliver the 97% standard set out in licence.

SGN has significantly out-performed the allowance in GD1 by £146m. SGN attribute this outperformance to improved allocation of workloads reducing non-productive time as well as innovation in the in-field activity reducing repeat visits and in-field waiting time.

Costs in GD2 are forecast to increase from an average of £23.7m p.a. to £26.8m p.a. SGN attributes this largely to the loss of the complimentary legacy meter work. SGN comments that it expects to absorb 40% of the cost of this additional waiting time within its proposal; however, it is not clear why SGN cannot fill more of this waiting time with new or increased workloads in other areas.

Since 2009, the number of reported escapes has been falling and SGN attributes this to a range of reasons from the repex programme to improvements within household systems driven by boiler scrappage programmes and the weather.

SGN has rightly chosen to not include forecasts for extreme weather events in its costs and has used the GD1 actual weather to forecast future weather impacts (rather than assuming a reversion to the long-term average). This reduces the risk of outperformance due to favourable weather as was seen in GD1 and as such offers valuable customer protection.

SGN also forecasts a continued reduction in public reported escapes but it offsets this with forecast increases relating to smart interventions. This is well explained and seems to account for almost all the cost increase from GD1 to GD2. SGN demonstrates that the impact of smart interventions is well managed and has produced scenarios with a volume related re-opener. As the driver of costs is significantly outside of management control this seems a reasonable position to take.

Chapter 8: Resilience

8a Asset resilience

This is largely covered by our comments on chapter 7. In this section SGN also describes the increasing challenges in maintaining distribution network integrity in the face of unpredictable, severe and extreme weather patterns. This has been the driver for a number of projects requiring significant capex. The CEG is sympathetic to these challenges, particularly given the company's footprint and the comparatively extreme conditions faced by the Scotland operation. This also links to the proposals around climate change adaptation in chapter 10.

8b Cyber security

The need for priority to be given to cyber resilience issues in the GD2 planning process was raised with stakeholders in early engagement workshops and unsurprisingly SGN was encouraged to take detailed advice from relevant expert bodies.

As such, the CEG has appreciated SGN's close working with the National Cyber Security Centre and use of its assessment framework. Without claiming any particular technology expertise CEG members have observed SGN's thinking develop through successive iterations of the plan, resulting in a much more integrated narrative around information technology (IT) and its interrelationship with operating technology (OT). This, together with further detail on costs and attention to emerging dependencies within the supply chain, are welcome.

The cyber resilience plan is well thought-through and presented, with clear attention to monitoring metrics, tempered by appropriate acknowledgment that we cannot know the exact scale or nature of future attacks. The CEG is therefore unsurprised that to be ready in the face of all potential threats, upscaling and upskilling of the team is proposed. We do not underestimate however, the difficulty of recruiting the appropriate talent to the business and as such encourage and commend the efforts we have been told about to collaborate across the industry.

We understand Gartner has been commissioned to provide external assurance to SGN's cyber/IT measures, and trust that Gartner's report will not only prompt appropriate further development within SGN, but also provide ideas for further industry collaboration such as on open data (discussed further in chapter 11).

8c Workforce

The sustainability of SGN's workforce has been a persistent concern of the CEG's since the early stages of the GD2 planning process. Those close to the industry were well aware of the ageing profile of the workforce and the associated skills and succession challenges. Others expressed concern about more macro challenges, such as the potential end to freedom of movement through Brexit. We have heard about the heavy dependency of SGN's South operation on an arms-length, less dependable contracted workforce, compounded by a very obvious difference in approach to workforce planning between Scotland and the South, necessitated by big differences in workforce mobility, demand and pay. The dependence on contractors for the successful completion of the repex programme was noted.

Participation by SGN in industry-wide research (by the Energy and Utilities Skills Partnership) has acted as essential underpinning to understanding the scale and nature of the challenge companies face in GD2 and is to be commended. As a result of this analysis, SGN is now expecting approaching 3,000 vacancies to arise during GD2, a not inconsiderable challenge. In response, early engagement with stakeholders steered the company to emphasise investment in retention and in recruitment and training through apprenticeships. These were important early initiatives.

We applaud SGN's ongoing productive relationships with its partner trade unions and see real progress has been made during GD1 on safety, wellbeing and work-life balance. Enabling further exploration of working hours/patterns in GD2 through the proposed re-opener appears sensible, while noting the core issue of pay rates is due to be revisited during GD2 when the current four-year deal comes to an end.

However, in considering the draft plan, the CEG became concerned about the limited stakeholder engagement beyond the trade unions and that a broader customer/public take on workforce issues was not being invited. Indeed, there seemed a level of surprise that these issues - perceived to be internal management challenges - were of interest to a wider community. We prompted the company to develop their thinking around diversity, as a key aspect of social responsibility and to reflect the communities they operate in, but as importantly as a contribution to solving the recruitment and retention challenge. A greater focus on recruiting and developing women and reaching out 'beyond the usual suspects' was encouraged. We felt that early drafts of the plan lacked an overarching strategy or narrative in this regard.

It is pleasing that SGN has responded to our challenge, and the plan now describes a more concerted approach to broadening and diversifying its workforce, viewing the need to renew the workforce over the next period as an opportunity as well as a problem. Findings from later customer research have been appropriately brought to bear, with e.g. the willingness-to-pay exercise revealing that customers were willing to pay for initiatives to support young people entering the industry and retraining/work opportunities for ex-service personnel or homeless people. The section on 'building a diverse workforce and inclusive culture' (8.12) gives welcome recognition to the scale and nature of this agenda with the lack of appropriate representation in the current workforce of women, people with disabilities, and from black and ethnic minority communities. The gender pay gap is appropriately referenced.

Recent feedback from stakeholders has steered the company to prioritise work in the very ethnically diverse London region. This is a good start. However, the CEG remains concerned that much of the work to benefit from engagement with a wider network of stakeholders on *how* to connect with and become attractive to new employees is still on the 'to do' list. We welcome the commitment to continue this engagement through the remaining part of GD1 and into GD2.

We also remain concerned at a higher level about workforce sustainability. The uncertainty associated with the future of the gas industry in general, the need to bring in new talent and expertise to transition to a net-zero future, combined with the potential crunch on employment following an end to freedom of movement are significant issues that the CEG encourages the company to prioritise. Brexit and the associated macro-economic challenges are only referred to obliquely in the plan, although we understand they were covered in the cross-industry report. Given the rapidly growing public appreciation of these issues in the context of e.g. the NHS, it is highly likely they will feature in future stakeholder and customer engagement exercises.

Chapter 9: Building a shared net zero future

- SGN identified early on that the environment was a priority for customers.
- There has been a strong call from customers and stakeholders for SGN to tackle leakage which SGN has responded to.
- We would like to see SGN's target for its overall carbon footprint treated as a formal reputational ODI, with more detail on the metrics it will report on in the EAP.
- It is vital that there is more transparency and stakeholder engagement around the annual reporting on the EAP than there has been on 'Greenplan'.
- The Environmental SteeringGgroup is an excellent way to provide ongoing challenge and oversight given the fast-changing policy landscape.

SGN's engagement on the environment and de-carbonisation

SGN identified early on (back in 2018) that the environment was a priority for customers and included this in its thinking alongside the other priorities that had been established in GD1. SGN therefore included environmental outputs in its subsequent work to refine the priorities (the Max Diff and willingness-to-pay work).

While quantitative methods are not so well suited to assessing complex options outside customers' experience, the CEG agrees with SGN's interpretation that this research confirms the priority that customers attach generally to reducing carbon emissions and improving environmental protection. This message also came through clearly in the qualitative research at the start of 2019. Overall, minimising environmental impact and pursuing de-carbonised energy solutions have consistently come out as the two highest investment priorities for customers. In general, future consumers placed a slightly higher emphasis on them than customers at large.

Recognising the complexity of some of these issues and the limited time available, the CEG encouraged SGN to make use of expert stakeholders to help shape the detail of its plan in this area rather than feeling it had to obtain direct consumer input in all cases. SGN had already been doing this to a large extent through its Future of Heat workshops and specialist sustainability round tables. For example, the sustainability roundtable in early 2019 highlighted the importance of tackling leakage as the best way to reduce emissions.

In the event, SGN did also carry out in-depth qualitative research on the key elements of its Environmental Action Plan. The overwhelming message from customers was that SGN should focus on tackling leakage. While there was support for other elements of the plan, in the qualitative research customers kept wanting to bring SGN back to the question of leakage. When presented with lowmedium-high options for different elements of the EAP customers frequently called for SGN to do more than they were proposing on "high" and the price tags that SGN put forward (based on their actual estimated costs) were seen as relatively low as a proportion of the bill. Customers were however wary of paying for something that SGN would have to do anyway or that would deliver cost savings to them in the longer term.

SGN also carried out a further expert roundtable which highlighted again the importance of leakage given the high Global Warming Potential (GWP) of methane as compared to carbon dioxide.

This chapter includes further references to the GD1 'Greenplan' (9.2). SGN has acknowledged the weaknesses around external engagement on 'Greenplan' and we hope that it has learned the lessons.

For there to be meaningful stakeholder input on the EAP – including how effective any reporting against the proposed metrics will be as a reputation tool – we would have expected SGN to share a copy of the EAP itself with expert stakeholders, not simply to present highlights. We hope SGN will continue to engage on this through 2020 and to draw on the expertise of its proposed new Environmental Steering Group as it develops its proposals for annual reporting.

CEG's role in this area

The CEG has played a slightly different role in this area as we have sought to champion the views of future consumers (recognising the challenges of capturing this perspective).

In setting up the CEG we included two young academics who could help champion the future consumer perspective drawing on both their regular engagement with young people and their understanding of different perspectives around future energy trends. Other members of the CEG also bring wide knowledge of the energy system, climate change and new market models. Our two local authority experts are aware of the ambitions of these players, which have also risen substantially over the past year. Many of us attend a variety of industry and other events as well as reading widely on the topic and hence have a good grasp of what stakeholders more widely are saying about future energy trends which we use to challenge SGN. We recognise that as a CEG we are not here to represent our own views but to ensure that consumer and stakeholder views feed into the process. However, we have not relied solely on SGN organised engagement to do this and have encouraged SGN to ensure it too is drawing on these wider sources of insight.

Given this focus we had concerns early on that Ofgem's framework was limiting SGN's ambition in this area and hence we chose as a CEG to respond to Ofgem's consultation on the issue. In Ofgem's final decision there was a much stronger emphasis on environmental issues and we have continued to press SGN to do more, reflecting the strong support and willingness-to-pay that has come through consistently in their consumer research. Overall, this is an area of the plan where we have provided significant challenge to SGN and the plan has evolved substantially in the light of that challenge.

SGN's broader vision and strategy (9.4)

As SGN explains, it has been working for some time to develop a strategic framework aligned to the UN Sustainable Development Goals (UNSDGs). The CEG welcomed this approach and are aware that, particularly in Scotland, there is strong support among stakeholders for the use of this framework. As such we support their broad approach to the area, looking more widely than just at the environmental goals. We would expect to see robust reporting in future annual environment reports against the eight UNSDGs they have chosen to focus on.

Steering group for environmental action (9.4.1)

The use of an external steering group to oversee SGN's environmental performance was an idea that the CEG put forward mirroring what SGN had proposed for FPNES. While there are still details to be worked through, we believe that this will play an important role in scrutinising SGN's performance under the EAP against a changing policy backdrop. Where targets may appear unambitious now there will be scope to strengthen them going forwards as some of the practicalities become clearer.

Reducing leakage (9.5)

As discussed above, this is a priority for consumers. While the targets may not appear that ambitious compared to GD1, SGN has set out a clear programme of activity and innovation and the CEG are keen to see that drive maintained.

SGN's main initiative for reducing leakage is its accelerated repex programme, which the CEG strongly support based on the stakeholder and consumer research that has been undertaken. As discussed in chapter 7, this has been the subject of much debate and SGN's position has evolved through time – seeing it initially as safety driven and hence proposed to be dropped but now reinstated based on the carbon savings it delivers.

On pressure management, we have challenged SGN about the expected increase in leakage levels and understand both SGN's strong current performance and the challenges going forward. We support the innovation SGN is undertaking to mitigate these effects.

SGN has also set out a range of other activities that help reduce leakage including their focus on rapid repair, action to reduce third party damage and innovations to help manage gas escapes. As SGN notes there is a clear linkage between safety and emissions which will drive continued action in this area. We support the specific PCDs to rollout the innovations identified.

That said, we would have liked to see SGN committing to do more to measure or model the effects of these wider initiatives. This was also supported by expert stakeholders at the August roundtable. We are aware that leakage is difficult to measure and that impacts are currently modelled. SGN seems to assume it cannot be rewarded for initiatives that are not covered by the current modelling. However, Ofgem had left the possibility open and SGN could potentially have pushed for some sort of incentive in this area given the priority attached to it by customers and the strong evidence on the cost of methane being released into the atmosphere. This would have encouraged SGN to continue to seek out other ideas and innovations that could help in this key area. As a minimum, we expect SGN to keep looking at ways to better measure leakage to demonstrate progress against the ambitions in the plan and to provide a strong reputational incentive.

Finally, we have highlighted to SGN the global warning potential from (unburned) hydrogen leakage and hope that SGN will take that on board as it develops the hydrogen pathway.

SGN's Total carbon footprint (graphic and 9.6)

The final version of SGN's plan includes a clear commitment to reduce its total carbon footprint including leakage by over 25%. While SGN will be expected to track this as part of its formal EAP reporting, we would also like it to be considered formally as a reputational ODI.

Given this over-arching framework it is hard to see the value of the straight-line trajectory in Figure 9-2 which the CEG has been very critical of as lacking credibility or ambition. Given the IPCC evidence on the impact of even 1.5 degrees of global-warming and the cumulative impact of emissions, the CEG would expect SGN to be striving to deliver the maximum savings that it can in the early years. The use of science-based targets is welcomed but that framework continues to evolve and SGN needs to ensure it keeps pace with developing thinking.

Moreover, it remains hard in places to link numbers in the text with those in the over-arching graphic. For example, the graphic shows pressure management contributing to reduced leakage while the text and table 10.1 show it causing an increase. The treatment of green tariffs is also unclear. We note some commitment to measuring embedded carbon and supplier emissions, but again more work will be needed to establish clear metrics and targets in this area.

The CEG has voiced concerns since the October plan about the need for a clearer trail on the carbon numbers. This final plan is much improved but having a robust set of baseline numbers will be essential for effective monitoring by stakeholders going forward.

While SGN has made some very welcome progress over the last six months on its plans for decarbonisation in GD2, in response to frequent CEG challenge, it remains unclear whether SGN's plans in this area are as ambitious as they might be. However, SGN's proposal to establish an Environmental Steering Group will allow these targets and progress against them to continue to be challenged in the light of evolving government policy in this area and is strongly welcomed.

Biomethane (9.13) - see chapter 10

Other environmental impacts

The EAP outputs are set out in chapter 10 and our comments on them are covered below. A number of other initiatives are referenced in the EAP but not listed as formal bespoke outputs in chapter 10. These include company cars, energy efficiency in buildings, use of green tariffs, work with the supply chain, embedded carbon assessment, further reductions to resource use and waste. While these are welcome, and in many cases would have clear customer and stakeholder support, the status of these commitments is unclear. It is assumed that SGN will report on them alongside other outputs in its annual EAP report.
Chapter 10: Environmental Action Plan (EAP)

- We welcome SGN having increased its ambition on biomethane and in particular the use of a steering group to keep the target under review.
- We support the PCDs proposed and indeed believe that the consumer/stakeholder feedback would have justified SGN going further in some cases.

SGN's engagement on the EAP outputs

As set out in our comments on chapter 9, SGN has undertaken significant research which evidences the priority that consumers and stakeholders attach to the environment and to de-carbonisation. SGN has also tested specific elements of the EAP through extended qualitative research with customers and an expert stakeholder roundtable as well as through willingness-to-pay.

To inform its thinking on how to increase biomethane volumes, SGN has engaged with biomethane producers initially just through the Energy Networks Association (ENA) but then latterly also through its own roundtables.

Sector outputs – leakage

Ofgem has broken down what it wants to see in terms of a sector performance target on leakage into three components:

- Leakage reductions driven by repex (where the costs are re-covered through that programme);
- Leakage reductions resulting from pressure management and MEG (where Ofgem acknowledge there may be little more to be gained but there will be a financial penalty if leakage increases);
- Leakage reductions from other sources (which is essentially a reputational incentive but Ofgem has indicated it would be open to a bespoke financial incentive).

SGN's plan, described more fully in 9.5 includes action in all areas including an accelerated repex programme and innovation projects to tackle leakage from other sources (although table 10.1 and 10.2.3 are confusing as they define this third category as theft/own use which does not have the same environmental impact). While SGN is proposing that these various innovation projects are counted as bespoke outputs they are defined in table 10.1 in terms of the activities involved not the outcome in reduced carbon.

The specific leakage targets have not been tested with stakeholders although the message is clear that they would want SGN to be ambitious in this area. On the face of it, the targets that have been set look unambitious relative to progress achieved in GD1 and given the priority placed on this by customers. However, we acknowledge that GD1 activity targeted the leakier pipes and progress is more challenging for GD2. A continued drive is required to meet the expectations of stakeholders and customers. We discuss this further in our comments on chapter 9.

Bespoke outputs – Environmental Action Plan

SGN has identified a number of bespoke outputs associated with its Environmental Action Plan (EAP). These are essentially price control deliverables or uncertainty mechanisms (use-it-or-lose-it) where it is unclear at this stage what action might be most appropriate. In several cases what is being proposed

initially is a survey to assess what is required with the survey as a deliverable and subsequent work as use-it-or-lose-it.

This framing makes sense given the stage of development of SGN's thinking in this area but it is slightly disappointing that SGN has not been able to work up its plans more fully in some areas given that SGN has been aware of customer interest in environmental issues for some time – albeit the requirement for an EAP was only introduced by Ofgem in June 2019. We also note the emphasis in the EAP tends to be on activities and the allowance being sought, rather than on the outcome that customers want to see delivered.

It is clearly crucial that there is some sort of ODI which tracks SGN's performance in reducing its carbon footprint not simply delivery of the named projects. While some targets are mentioned in the EAP supporting appendix it remains unclear what SGN is committing to in this area. Ofgem has highlighted the need for consistent reporting across companies in this area and we therefore trust that common metrics will be specified by Ofgem in due course.

The need to focus on outcomes was picked up by customers in the context of vehicle replacement and low emission vehicles where customers suggested that lower cost solutions like reviewing the use of vehicles and driver training should also be considered. SGN has picked up these ideas but they are not reflected in targets for reductions in emissions from vehicles.

Based on the engagement that SGN has done and our discussions with the team through the development of the plant, the CEG's view of the specific outputs proposed is:

Vehicle replacement rate – the CEG has voiced concerns that a rigid replacement schedule may limit discretion to optimise timings in relation to the introduction of low emission models. However, the six monthly reviews proposed by SGN provide flexibility and hence we support the output.

Low emission vehicles – the CEG had previously challenged SGN's initial assumption that suitable commercial vehicles would not be available and hence we welcome the fact that SGN has set a relatively high target in this area (to replace 50% of vehicles). In some cases, SGN may be driven to take action by legal requirements such as the ULEZ proposed for London and in such cases SGN cannot claim any additionality. We also note that there was strong consumer support for a move to 100% low emission vehicles in both the quantitative and qualitative research. While this may not appear feasible at this stage, we would expect SGN to keep the position under review as vehicle technology evolves.

Installation of PV and energy efficiency – There was a clear expectation from customers that as a player in the energy industry SGN should be leading by example in terms of its use of energy. SGN has already done some initial site surveys for PV on its buildings and governor sites but has more work to do. It is also unclear how this fits with the proposals for switching to a green energy tariff (9.6.6), which lacks clarity and detail on what impact it would have. We have also asked SGN whether it has considered long term PPAs with renewable generators as a (preferable) alternative option to a green tariff.

There is no substantive consideration of insulation/energy efficiency, (beyond LEDs) nor of the ways in which energy saving measures can reduce costs and thus benefit customers. The energy consumption of buildings was a target in the GD1 Greenplan which SGN missed, with consumption actually increasing significantly. Overall, the CEG view is that SGN is behind the game in both these areas compared to

many companies outside the sector and should use the proposed steering group to provide ongoing challenge.

Biodiversity – the proposal is only for a study at this stage and there is clear support for some action in this area, in particular if it can be coordinated with the work of other bodies.

Climate Change adaptation – this has been tested with expert stakeholders and has received support. The CEG recognises the importance of climate adaptation as highlighted by the Committee on Climate Change (CCC) and the Environment Agency and hence welcomes the focus that SGN has put on this area as an important strand of its resilience work which we hope will look broadly at potential impacts. Again, the EAP output is only a study (with use-it-or-lose-it funding for projects not already included in the base plan).

Bespoke outputs – biomethane

Biomethane outcomes is a specific area that Ofgem has said it expects companies to track as part of the Environmental Action Plans, with detail on reporting to be developed with stakeholders.

Since the July draft SGN has had a target of providing the equivalent of 400,000 households with green gas by the end of GD2. The CEG has consistently challenged this figure as it was lower in terms of an annual run rate than was achieved in GD1 and we were not able to reconcile it with projections from other sources such as the CCC.

Following our challenge on the October 2019 plan draft SGN has now increased its ambition to 450,000 homes as a reputational incentive and has taken up our suggestion that there be an external group to monitor progress and review the target in light of wider policy developments (as SGN had proposed for the FPNES) – two positive steps.

As set out at 9.13 SGN has innovation work ongoing aimed at easing capacity issues and addressing the billing constraints that currently mean biomethane has to be propanated, adding cost and carbon. We support the inclusion of a PCD to carry out the trials and use-it-or-lose-it funding to rollout the projects once proven, albeit the scale of these projects and proposed spend seem relatively modest given the importance of the issue.

SGN clearly recognises its target can be delivered through either facilitating new connections or increased throughput on existing connections although the relative contributions of each is unclear. Given the considerable uncertainty about the UK Government's replacement to the Renewable Heat Incentive (RHI), which has been the major driver of new biomethane connections, the ability to keep the target and actions under review is particularly welcome.

SGN sets out at 4.14.4 its commitment to improve communication with biomethane producers building on feedback received but there is limited detail. On the basis of the feedback from the key stakeholders in this sector it would seem that SGN is looking at the right sorts of activities but continuing scrutiny through the reputational incentive of regular reporting is important.

SIU biomethane – see chapter 11

Bespoke outputs - IT / cyber (10.7 and 10.8)

The list of Shared Future outputs also includes three relating to data (DCC membership, cyber resilience, IT technology readiness and open data sharing) that quite reasonably have not been tested with consumers but have been discussed with stakeholders at MFT events.

On DCC Membership we are aware of government and other players interest in GDNs taking this on but SGN still do not appear to have a clear case. The inclusion of a PCD makes sense in the context of that uncertainty. We comment on open data in chapter 11 below.

Costs

While the CEG is supportive of the various outputs proposed, most of which have clear customer and stakeholder support, the costs need to be subject to further scrutiny. Many of the costs (for the surveys for example) are simply estimates for which there is no historical precedent and in other areas (for example on IT technology readiness) it is hard to unpick what is needed from business as usual.

The CEG also has a specific concern around the treatment of EAP projects that are likely to yield future cost savings. For example, on the accelerated vehicle replacement (10.4.4) while the capital cost of the accelerated cycle would be £2.4m p.a. there would be running cost savings of £1m p.a. On this basis SGN should only be asking for the net figure of £1.4m not the full £2.4m. Similar issues arise on low emission vehicles, energy efficiency measures and on the installation of PV although the running cost savings are not given for these. As highlighted in the research in the summer, *"A number of stakeholders queried why the customer should pay for SGN to install technologies and renewables, arguing that companies install solar PV and renewables to not only "green the business" but actually also make cost savings".*

Chapter 11: Whole systems solutions

- SGN's thinking on whole systems is informed by engagement with a range of industry stakeholders.
- SGN's focus has been on providing the evidence for hydrogen as a route to addressing the major challenge of heat de-carbonisation, where its ambition shines through.

SGN's engagement on whole systems

SGN's understanding of the need for whole system solutions to address climate change is informed by its ongoing engagement with industry players and other stakeholders, including through the specific Future of Heat expert workshops that it hosted in Scotland in 2018. In our view SGN is perceived as an expert in the field with an understanding of the broad trends across all sectors.

Although changes to the transport sector are highlighted in this chapter, we have not seen evidence of SGN engaging more broadly with fleet owners or other players in the heavy vehicles sector beyond a small number of interesting innovation projects. However, given the uncertainties that remain about the future of transport de-carbonisation this is not an issue provided SGN does engage with these groups as thinking in the transport sector develops through GD2.

Inevitably SGN has focused on the implications of a scenario in which hydrogen plays a central role and we and other stakeholders have challenged SGN to ensure it continues to look at the implications for its network of other scenarios such as one with more reliance on district heating or electrification. While SGN's thinking on alternative pathways is less developed, we are satisfied that the potential for alternative futures has influenced SGN's thinking on uncertainty mechanisms and the 4Rs strategy, for example. SGN's wider collaborative initiatives on whole energy systems are welcome but we would note that SGN's focus is very much on engagement with the DNOs and that wider system actors, such as distributed energy generators and local authorities, receive less emphasis. We hope this will evolve during GD2.

Whole systems charter (11.2)

We recognise that historically there has been very limited engagement between gas and electricity networks and hence this charter – while on the face of it not particularly innovative and limited in coverage – actually represents a positive step forward in terms of whole systems working.

Local Area Energy Plans (11.4) / Zonal De-carbonisation Pathways (11.8.1)

As noted above the CEG has been pressing SGN from the start to build on its existing relationships with planning teams in local authorities to include energy and environment teams, in particular in Scotland where there is a proposed requirement for local authorities to have Local Heat and Energy Efficiency Strategies. Given the challenge of heat de-carbonisation we see devolved administrations, city mayors and local authorities – many of whom have declared climate emergencies – as increasingly important stakeholders for SGN. This view is endorsed by the National Infrastructure Commission (NIC) in their latest report on "Strategic Investment and Public Confidence". As such we welcome the focus that Ofgem has put on Local Area Energy Plans in its latest plan guidance.

However, the SGN plan does not take the issue forward and does not draw out the lessons that it has shared with us from its engagement to date around the capability challenges that exist in local

authorities and the lack of detailed plans to support the declared climate emergencies. That said, SGN does commit in its GD2 engagement plan (4.14.4) to do more in this space as local authority interest and thinking develops and has included (in table 16-6) funding for a new function to deliver this work, which we support.

The section on Zonal De-carbonisation Pathways is related to this and is a welcome acknowledgment from SGN that the future is likely to see some areas using hydrogen while other areas might be more reliant on biomethane or electric solutions, including hybrid heat pumps. We recognise that this is early thinking but hope that as it develops it might feed into SGN's assessment of capex solutions (beyond the repex programme) as SGN start to have a better sense of the potential asset stranding risk. It also highlights the importance of engagement with large gas users given the emphasis in the Delta-EE work on industrial hubs as the initial focus for hydrogen.

Modernising energy data (11.5)

The CEG sees a positive and enabling approach to open data as essential to the achievement of the company's plans, and for wider social and environmental purposes, and therefore meriting of investment. Embracing the Energy Data Taskforce recommendations and engaging with the ENA are good first steps; especially the adoption of the 'presumed open' concept. However, we are aware of the substantial system and cultural challenges such a shift can present and encourage SGN to connect with the growing, cross-sectoral, community of open data experts, including the Open Government Network, the Open Knowledge Foundation and Open Data Scotland to access the latest thinking and best practice. This should also enable SGN to think more broadly about ways (appropriately managed) data-sharing could benefit local communities and build resilience through local area planning and other collaborative projects.

Whole system interactions (11.6)

The CEG's views on some of the specific examples listed are as follows:

Peaking generation – we welcome the fact that SGN is proposing to engage with electricity networks to explore ways of using capacity most effectively. We also support the fact that the underlying investment required in this area is proposed to be covered by an uncertainty mechanism to ensure consumers are not paying for investment that is not needed. We have however encouraged SGN to continue engaging with policy makers, including in local authorities, to ensure they understand the impacts on gas customer bills of an uptake in peaking plants.

District heating and MOBs – The section on MOBs and district heating gives an example of where there is a regulatory barrier to cost-effective heat de-carbonisation which we would expect Ofgem to work with government to address. Without this the "buy-out" price SGN may have to offer would impose additional costs on consumers at large.

Scottish Independent Undertakings (SIUs)

The Scottish CEG sub-group has taken a strong interest in the SIUs, including paying a site visit to Campbeltown where an early version of the plan had envisaged some very significant investment on safety grounds which the HSE has now accepted is not needed. Even so, the totex proposed for GD2 is significant at £48m to serve under 8,000 customers. We recognise that SGN has an obligation to maintain service to these customers and to do so safely. However, given the significant cost and the unique opportunity presented by these island networks we have continued to press SGN to look at how they could be used to provide learning to support the de-carbonisation challenge, building on the previous successful Opening the Gas Market project in Oban.

We are therefore pleased that the plan now includes proposals for biomethane feasibility studies (chapter 9) and hydrogen feasibility studies (chapter 11). The proposed consideration of bio-LPG for Stornoway when retendering the "Provision of LPG" contract in 2020 (17.11.5) is another positive initiative as an interim solution to de-carbonise the network while working towards the use of surplus renewable electricity to produce hydrogen.

We note that a biomethane feasibility study has already been completed for Campbeltown and that the exercise confirmed that use of biomethane would result in reduced transportation/operating costs. However, the financial viability of such a project would depend on finding an interested biomethane developer and on future changes to the RHI or other funding.

In the meantime, the move from transporting LNG from road to rail in GD1 has clearly generated cost savings, increased transportation safety and reduced carbon footprint. The intention to increase volumes transported by rail in GD2 should yield further cost and carbon savings.

Appendix 17 sets out the importance of SGN having obtained permission to supply gas out-with GSMR gas quality limits in the SIUs, resulting in a forecast positive variance in Opex of £52.4M for GD1. The inclusion of an uncertainty mechanism (re-opener) covering gas quality seems appropriate given the importance of the GSMR exemption and the impact should that be removed and increased nitrogen ballasting become necessary.

The CEG acknowledges that in the plan and supporting appendices, SGN shows that it has carried out extensive investigation into the options for providing enduring energy supplies to the SIUs and the cost of alternatives to continuation of existing energy sources. This shows that alternatives would involve significant cost and customer disruption, although we have concerns that the case for electrification is painted very negatively (given the expectation it will form part of the wider de-carbonisation pathway). While change may not be justified in GD2, these options will need to be kept under review in the light of developing government policy on heat.

Regarding the lack of supplier competition in Stornoway, the CEG welcomes the consideration of the viability of a supplier switching service, assessing requirements to facilitate competition from a systems and regulatory/contractual perspective. This would help tackle fuel poverty, providing a wider range of tariffs and the option of dual fuel contracts.

Chapter 12a: Managing uncertainty mechanisms

- From early in the process the CEG has highlighted the importance of SGN addressing how it will handle the uncertainty that exists around the future of gas.
- SGN is looking to make extensive use of uncertainty mechanisms and on balance we consider that this is protecting customers.

SGN's engagement around uncertainty

The approach to be taken to the handling of uncertainty around the future of gas and the need to ensure that future customers are not left paying for stranded assets was one of the key issues raised by the CEG in our December report at the start of the process.

This applies in particular to the forecast volume of connections, which is the main driver of connections and reinforcement spend. While SGN has been confident of its projections from discussions with planning teams, the CEG has cautioned that there remains significant uncertainty around these forecasts given the Future Homes Standard and local authority ambitions for de-carbonisation, including for example the GLA focus on district heating and energy efficiency. As noted earlier, the CEG has pressed SGN to engage more with local authority energy teams to understand these trends, which it is starting to do. While SGN continues to rely on the provision of planning permission as the driver of its base forecasts it has accepted, based on CEG and wider stakeholder feedback, that there is significant uncertainty in this area and hence has proposed a volume driver, which we support.

While the CEG would not necessarily have expected SGN to engage with customers on what is a fairly technical question of regulatory design, SGN was keen to test its broad approach to uncertainty mechanisms with customers through the extended qualitative research it carried out in the summer. SGN used accessible examples like mobile phone tariffs to talk with customers about complex concepts like volume drivers. This research yielded some useful insights, although it was clearly a difficult area. The summary of findings presented in the plan suggests consumers would expect to see a balance of fixed and volume related funding although the research report notes there was a concern about the risk of increased bills arising from volume drivers and re-openers (which customers felt could be mitigated by better forecasting by SGN). The plan also highlights that customers support ring-fenced funding for support for vulnerable customers but raised concerns that SGN would need to demonstrate that this was spent efficiently.

The difficulty of engaging on these issues is further illustrated by the fact that at the expert stakeholder roundtable in the summer a majority of stakeholders said they did not have enough information about the funding of the innovation/future of heat projects to come to a view on whether they supported SGN's funding mechanism proposals.

SGN's proposals for uncertainty mechanisms

SGN has proposed a very large number of uncertainty mechanisms and the CEG has sought to test that these serve to protect consumers in the face of uncertainty, rather than simply protecting SGN. To a degree this is hard to assess as it depends on the counterfactual (what level of base allowance Ofgem would provide) but on balance we consider that these mechanisms do serve to protect consumers' interests given the level of uncertainty that we and stakeholders can see going forward:

- We are aware that variations in repex volumes delivered have been a source of outperformance for some GDNs historically and consider it makes sense for this (**tier 2a** and **steel**) to be subject to a volume driver (or where that is not practical, as on **stubs**, a use-it-or-lose-it allowance);
- Similarly, as discussed above we support the use of a volume driver to handle the uncertainty around **new gas connections** and the need for **distribution (below 2 bar) reinforcement**;
- On **transmission (above 2 bar) reinforcement** we again recognise that there is significant uncertainty (including related to peaking plant volumes) and support the use of a re-opener in this context which provides for greater scrutiny of any adjustment by Ofgem;
- On the EAP (as on vulnerability which is not listed presumably because it is a sector mechanism) SGN's plans are as yet not clear and indeed need to stay flexible to respond to the changing context. In this situation we can see the case for a use-it-or-lose-it allowance so that customers are not paying unless SGN delivers. However, as consumers highlighted, there needs to be suitable governance to ensure that the ring-fenced money is spent efficiently. The proposed use of stakeholder steering groups is a good way of providing that scrutiny;
- On **environmental resilience**, which the CEG recognises is important, the initial assessment would be covered by the EAP use-it-or-lose-it, certain named projects are included in base totex and a re-opener is then proposed for any further projects that turn out to be needed. Given the extent of uncertainty around climate impacts this seems appropriate;
- Other re-openers cover **smart metering**, **street-works**, **cyber and FPNES**. These address material areas of uncertainty;
- We recognise the range of **potential policy changes** that SGN has identified and is seeking reopeners for and support the broad approach, although there is some potential overlap between the different mechanisms in particular on funding of large demonstration projects where the best mechanism needs to be determined by Ofgem. On the heat policy re-opener we support the proposal that it should also cover regional policy changes given the very different policy context in Scotland.

While we are broadly supportive of SGN's approach, we do note that as these re-openers (and the significant innovation spend) are excluded from base totex, there is a risk across all GDNs of creating a misleading picture of the overall bill impacts of the plans. We hope that as Ofgem develops its thinking on the handling of the significant energy system transformation expenditure required it will find a way to ensure the impacts on customer bills are transparent.

Also, as a general point, it is important that, where appropriate, re-openers can also be triggered by Ofgem (e.g. if employment legislation was relaxed post-Brexit significantly reducing costs).

Finally, we are aware that some of these risks are ones that in the past the companies might have been expected to absorb and that Ofgem always has a de minimis threshold for re-openers. We recognise that there are costs for all sides in having a lot of uncertainty mechanisms and ongoing Ofgem involvement to determine on issues. However, we recognise that Ofgem has been looking to set a cost of capital that is consistent with a low risk price control (reducing costs for customers) and that an inevitable consequence of that may be more uncertainty mechanisms. It also means there is a case for a lower re-opener threshold as SGN propose.

Chapter 12b and 12c: RPEs and efficiency

12b Real price effects

SGN argues that the pressures placed on its costs are not adequately reflected in CPIH. SGN has used third party assessments of historic labour costs (direct and indirect) and provides a sensible rationale for assessing alternative indices. However, inflation rates in these two categories are to at least some extent within management control (e.g. indexing contracts by CPIH). As such, we would expect SGN to have more control over these future costs than it claims and it is unclear why the factors it has considered are not already reflected within CPIH. We note SGN has proposed alternative indices for the material items but the CEG has not examined the validity of these alternatives.

12c Efficiency

Current performance and SGN's approach to assessing efficiency (12.5)

SGN shows a strong performance in GD1 on totex and cost efficiency. SGN is forecast to outperform the allowance by £800m over the period. SGN attributes this outperformance to a mix of efficiency, external factors and variations to original assumptions.

Using either SGN's proposed efficiency approach or Ofgem's GD1 methodology, SGN appears relatively efficient compared to other GDNs although in the South, SGN appears to be less efficient in recent years.

SGN favours a totex modelling approach over a disaggregated model approach and cite a number of issues with the disaggregated models, in particular with the repex model where SGN is ranked around the bottom in the industry. The CEG has not challenged the arguments put forward by SGN in detail as there is an expectation that Ofgem will undertake this work in the round considering representations from the wider industry. However, we note that the arguments put forward by SGN on the unit rates of large diameter pipes and the fact there is no volume driver for the innovative CISBOT have merit. SGN also makes the case that efficiency and performance are related and that Ofgem should endeavour to take account of performance in the assessment of efficiency which we agree would be the correct approach though it may be difficult in practice.

Regional factors (12.5.1-5)

Ofgem has asked that companies explain any regional cost drivers that impact companies disproportionally and will affect the efficiency assessment. SGN has detailed three such factors, the London effect, sparsity in Scotland and costs associated with serving the Isle of Wight. Whilst the case is made for these additional costs the case would have been strengthened if SGN had also included offsetting beneficial regional factors such as lower labour rates in some areas.

Productivity assumptions (12.5.6)

SGN's starting position for GD2 is today's costs to which it has applied productivity and efficiency savings amounting to £77m over the period. We note this is materially less than the outperformance achieved in GD1 which totalled £800m, with £563m being attributed to efficiency. Given the historic efficiency gains and ongoing investment in innovation (discussed in chapter 13) we challenged SGN to be more ambitious on its own forecast efficiency. While the CEG welcomed the increase in the productivity assumption compared to the July plan, it remains unclear to us whether this is sufficiently ambitious, particularly when compared to the previous period – although we note that SGN's target of 1% p.a. appears higher than that proposed by any of the other GDNs. SGN has told us that there were some one-off factors in GD1 that drove the significant savings it was able to achieve, such as the removal of tier one contractors from some of the supply chain to reduce overhead costs. However, as noted in our comments on chapter 13, we would have hoped that through the significant innovation spend in GD1 there would be innovations that could help further reduce costs in GD2 either through the productivity assumption or explicit innovation savings. We hope that the CCG and Ofgem who are able to compare across GDNs and have the resources to drill further into this will provide further challenge in this area.

In assessing the scope and scale of potential future efficiency SGN has relied heavily on Ofgem's benchmark models. We note that for support costs such as IT and business support costs, SGN has sought to use a third-party assessment to create an efficiency challenge. This effort to look beyond the sector in bench-marking performance is welcomed, although it is not evident how this is then reflected in the targets. While the theoretical analysis of drivers of efficiency are well explained and detailed, there is a lack of company specific evidence on the potential for SGN to deliver efficiency savings in GD2. As such, the overall 1% per annum challenge appears to be a top down target rather than one derived from an assessment of what opportunities for efficiency savings still remain.

Chapter 13: Innovation

- Scottish stakeholders and UK Government are closely involved in and supportive of many of the transformation projects proposed as informing key policy decisions going forward.
- > Aa a CEG we have seen SGN's passion and ambition in this area which we welcome.
- However, the total innovation funding proposed adds up to £405m which is not included in the overall bill impact that SGN presents.
- We would like the question of how these transformation projects should be funded to be explored as part of a cross-sectoral open hearing.

SGN engagement on innovation

SGN has presented its various transformation projects at a range of stakeholder events from the expert Future of Heat roundtables to the more general MFT events. There is strong support from stakeholders (including national bodies like the Committee on Climate Change and the NIC) for the important work to demonstrate the potential for hydrogen to de-carbonise heat. Scottish Government and BEIS have been represented at these events and are clearly supportive of the projects, many of which are in part dependent on funding from Government as well as through the price control.

Inevitably there are some stakeholders who are more persuaded by the electrification of heat as a scenario (or see a strong role for district heating). SGN has not always been so effective in ensuring that it is listening to these voices. SGN has often, in an unbalanced way, presented the hydrogen future as preferable and emphasised the difficulties of electrifying heat in presentations to the CEG and to stakeholders (see the SIU electrification case study in chapter 11). This unbalanced presentation may have influenced some stakeholders in articulating support for SGN's hydrogen innovation proposals. However, at this stage, when what is needed is more evidence to enable policy makers to take an informed decision, the strong belief that SGN has in the potential role of hydrogen is understandable and necessary. However, it is important that SGN continues to engage with academics to help validate their findings, which need to be demonstrably independent.

There has also been strong support from customers for innovation both to reduce costs in future and crucially to support the transition to low carbon. This comes through in both the quantitative research that SGN has done and the extended qualitative research it did in the summer.

Carrying forward innovation into GD2 (13.2)

One reason that customers support innovation is that it can be expected to reduce costs in future. As a CEG we have questioned SGN over the limited savings (£2.2m p.a.) that they expect to achieve from innovation in GD2 despite the fact that there are ongoing NIA projects in GD1, some of which one would expect to deliver benefits in GD2. SGN has suggested that the low hanging fruit has been picked and that the shorter price control period limits the incentive for self-funded business as usual innovation in GD2. Our view remains that the nature of innovation is that one may not be able to see now which innovations might succeed, but that some of the investments SGN has been and is still making in GD1 should deliver benefits. As such, we do not consider SGN's expected innovation benefits to be ambitious. SGN has strong experience of identifying valuable innovations and rolling them out in its business (from CISBOT to the self-amalgamating tape used on risers). We would expect this culture to continue even if the opportunities and incentives are somewhat reduced.

Innovation in GD2 (13.4 and 13.5)

We note that the level of business as usual innovation spending proposed for GD2 (£7.5m total) is relatively limited but are satisfied that SGN has a culture that will drive it to continue to look for innovation opportunities that can be cost effectively deployed. We understand SGN's concern about the need for continued investment in low technical readiness level (TRL) projects that will not deliver savings within this price control (and so cannot be justified as business as usual). We therefore support SGN's request for an additional category of NIA funding to support low TRL projects, subject to SGN making a contribution (as it proposes to do) in line with consumer views.

We welcome SGN's intention to use customers and stakeholders to co-create potential vulnerable customer innovation projects and to understand the impact of wider innovation projects on these customers. We note SGN has built on an established process of engagement with stakeholders to develop a list of provisional areas of focus. The use of the steering group for vulnerability and CO to provide oversight in the selection of initiatives is a sensible approach.

Energy system transformation key projects (13.6)

As noted above, the area where SGN has shown considerable passion and ambition is on establishing the demonstration projects around hydrogen. A number of major projects are described in the plan (H100, Cavendish, Aberdeen Vision) which have all been widely discussed with stakeholders. We recognise and support the need for projects like this to inform the policy decisions that government need to take. However, given the nature of the mechanisms proposed (re-openers or EST competition) the projects will be subject to further scrutiny once the case for doing them has been further developed. We have not therefore sought to scrutinise the specific projects proposed. We understand that there is now a formal initiative looking across all GDNs to ensure that the projects are coordinated and that there is no duplication of effort, which we support.

From the perspective of SGN's customers there is an important question of how the work to demonstrate the viability of hydrogen should be funded. Some elements of these projects are funded by government and we would like to see a clearer articulation from policy makers as to where costs should be re-covered through bills and where through government funding. On the assumption that the network focused aspects will remain to be covered through bills there is still a question as to whether this should be through a re-opener (which then means the funding comes from SGN customers alone) or through the Energy System Transition NIC mechanism (where costs would be borne by all GB customers). The CEG's view is that projects delivering GB wide learning should be paid for by GB customers as a whole – albeit that means that SGN's customers will also pick up a share of the costs of other GDNs' projects. This is a difficult but crucial issue that we believe could usefully be explored at the cross-sectoral session of the open hearings.

On a related point, we note that the total amount of innovation funding proposed by SGN (in table 13-2) is £405m over the five years. This is a very significant sum which is not included in base totex and hence is excluded from the overall bill impact (along with re-openers more generally). While we recognise the difficulty in putting a figure on the likely bill impact, we are concerned it is misleading to exclude it altogether. SGN has sought to address this in its acceptability testing by asking a separate question including the NIA funding but this covers a relatively small share at £66m over the five years.

Chapter 14: Competition

This has not been a particular focus for the CEG; however, we are satisfied from what we have seen that SGN is committed to using tenders where it can to deliver the best outcome for customers. We welcome the inclusion of a focus on customer outcomes (not just low cost) within their principles and had recommended to SGN greater use of community benefit clauses in their tendering processes to formally acknowledge and credit non-financial benefits of bidders' approaches.

We note the potential for early competition to be used in relation to major energy system transition projects which links to the point we have made above about the need for a wider debate on how these significant but crucial projects should be funded.

Chapter 15: Forecasting and scenarios

The common scenario (15.2)

While the CEG was somewhat sceptical about the value of industry trying to agree a common scenario, we have found it helpful to see the different assumptions and the impact that they have on investment. This highlights the obvious point that it is actually local demand and supply that drives the need for reinforcement on the distribution network and that macro level volume assumptions are not very relevant. Moreover, with repex and safety driven capex accounting for the majority of expenditure (and entry connection costs fully funded by the connecting party) the impact of macro volume assumptions is further reduced.

Where there is uncertainty and a direct impact on investment – as with flexible generators – then SGN has proposed volume drivers or other uncertainty mechanisms which we support as set out above.

We are pleased that the challenge and questioning that we gave SGN around its Long Term Development Statement (which is what determines its reinforcement plans) has prompted SGN to move to a more scenario-based approach, including some alignment with the FES.

Forecasting network investment (15.3) and sensitivities (15.4)

As always, models that are used for forecasting will struggle to cope with discontinuities such as the impacts of the Future Homes Standard and more ambitious climate programmes impacting planning rules in local authorities. As such, we have highlighted to SGN the importance of continuing wider engagement with stakeholders including large gas users and local authorities' energy and environment teams to help in anticipating such discontinuities.

SGN does acknowledge (15.4.3) the potential for significant increases in the levels of district heating – which, for example, we know the GLA are very supportive of. However, SGN seems to dismiss the impact, as 90% of district heating plants use natural gas as their primary fuel source. What is not clear is whether the volumes of peak gas demand are the same for such plants as they would be for individual boilers. We expect SGN's modelling to take this on board as district heating becomes more prevalent.

We have also talked with SGN about its use of interruptible contracts and whether further engagement might enable them to identify circumstances in which large gas users could be persuaded to participate. The use of the seasonal contracts is a good example of SGN working to find options that are acceptable

to consumers and we are pleased that SGN has said it will continue to look at potential code changes to enable the most effective use to be made of capacity where this keeps costs to consumers down.

Network investment and the pathway to net zero (15.6)

SGN alludes to the risks that connection costs (which are borne by customers at large in many cases) may become stranded in the event of a rapid transition to net zero. SGN highlights that at present it is obliged to offer connections to all parties on a non-discriminatory basis. We would encourage SGN to engage with policy makers to modify or clarify this obligation if it believes it is putting undue risks onto customers.

In looking at integrity related investment and repex, SGN has sought to model on a probabilistic basis the risks of asset stranding in the face of a 50-50 prospect of hydrogen being used in that part of the network. While the modelling contains a number of simplifying assumptions and is not that well explained in the plan, the CEG has discussed it and recognise the ambitious intent behind what SGN is trying to do. While not explicit, this would seem to have encouraged SGN to look at longer payback period projects than would have been acceptable in GD1 (given SGN's model suggests a low risk of stranding). We note that while SGN refers to a 35-year payback as a benchmark, the majority of the projects SGN puts forward have paybacks below 20 years.

Notwithstanding our support for SGN's efforts to address this issue, the appropriate (maximum) payback period to use, given the levels of uncertainty that still prevail around the future of heat, is a complex one that might merit exploration through a cross-sectoral open hearing. In any event we would encourage SGN to continue to develop this methodology as the potential for hydrogen becomes clearer, including the impact of Zonal De-carbonisation Pathways as described in 11.8.1.

We welcome the work that SGN has done to look at low-regrets investments in support of a hydrogen future even if at this stage they (rightly) could not be justified.

Chapter 16: Totex

As set out above, we have scrutinised the need for the various outputs that underpin the totex forecasts and believe that these reflect customer needs and wants. Where there are uncertainties about future volumes or requirements, then SGN has put forward uncertainty mechanisms to protect customers.

While not our primary focus, we have also sought to test and challenge SGN around the levels of costs assumed in particular compared to historic performance (in the absence of any cross-sector comparative information). We have highlighted some elements that we believe should be subject to further scrutiny by Ofgem including the overall productivity saving, the level of innovation saving and the EAP costs. The "bottom up" approach to calculation of the costs of the individual integrity projects (with CBAs for all projects over £500k not just the £2m demanded by Ofgem) gives us some confidence that these costs are robust. We note the challenge that the CCG have made around repex unit costs and have no basis for disputing the justification given by SGN – but are sure that Ofgem will want to test this further.

We have also pressed SGN on its definition of "like for like" costs and have flagged our concern that all new outputs seem to require additional funding, whereas we would have expected there to be some

equivalent one-off projects included in GD1 that are now complete but have not visibly been stripped out of the baseline for "like for like" comparison.

Chapter 17: Workloads and activities

Our comments on the main areas of workload are incorporated in our review of sections 7 and 8.

Our comments on SIUs are included in our review of section 11 (whole systems).

Chapter 18: Financing

Financing is a difficult issue to explore through consumer research (as reflected in the fact that the CEG is not expected to comment on it) and we had initially counselled against SGN trying to do so. However, we are aware that Ofgem has signalled that companies' proposals on cost of capital should be supported by evidence that they are in the customer interest. While the expert stakeholder research that SGN has carried out would seem robust, we do inevitably have concerns over how much reliance can be placed on the consumer evidence.

SGN has sought to test this through three separate pieces of research which it has then triangulated. What can be concluded reliably from the different strands of SGN's research is that consumers have a clear preference for stable bills, although the extent of future bill increases that they might otherwise face was not made clear to them.

Customer support for the company maintaining a good credit rating is based on a question that links this to bill stability and hence cannot be taken as a view on the credit rating per se (which consumers on the SGN panel would not be equipped to comment on).

The conclusion that customers support companies earning "fair returns" and current and future consumers paying their "fair share" of costs is statistically robust but does not say much, as customers will all have their own views of what is "fair" and customers are unlikely to say they would support an approach that is unfair.

Overall, the CEG would not wish to see too much reliance placed on the consumer research as supporting a particular level of the cost of capital. However, what can be drawn from this is a clear message about the importance of bill stability. Reflecting this, the CEG looks to the CCG and Ofgem to ensure that in considering the cost of capital they take proper account of inter-generational equity and consider not just the immediate customer impact of changes to the cost of capital but also the implications for future consumers, taking account of the very significant investment that will be needed in future to support de-carbonisation.

Appendix 1- Summary of CEG impacts on the plan

In our view, the CEG has had a very significant impact on SGN's plan, resulting in a more robust plan delivering a much stronger proposition for customers than would otherwise have been the case. This has been achieved by the CEG being sufficiently close to SGN to influence its thinking as it developed – but still resolutely independent from them, with the resources and expertise to form an independent view on issues.

Clearly there have been many forces shaping SGN's thinking and on some issues ours will not have been the only influential voice – but by sending clear messages through our formal reports, reinforced by the knowledge that our views would be given weight by Ofgem in due course, we believe our views have been particularly impactful. This is reflected in the numerous references throughout the plan to the CEG's views.

We have not done a formal CBA of the CEG input but given the sums involved in the plan and the relatively limited costs of the CEG we are satisfied that we have more than justified our costs. We have summarised our impact under six themes below:

1. A wider scope to SGN's engagement

There are various stakeholder groups that we pressed SGN to engage with that were being overlooked including large gas users, biomethane producers and local authority energy/environment managers (rather than just the planning teams). We also pushed SGN to engage with a wider range of stakeholders in support of their workforce strategy and diversity programme.

On the consumer side we challenged SGN to do more to engage directly with certain hard-to-reach vulnerable customers rather than just relying on engagement with third parties.

2. Fuller engagement on the final plan

In our comments on the July plan we made clear that the research that had been done to date was not adequate to justify the proposals SGN put forward. As a result, SGN put in additional resource and carried out a major programme of consumer and stakeholder research over the summer which provided a much stronger evidence base for the final plan.

3. A higher standard of engagement/consumer research

At a strategic level, we have encouraged SGN to think in terms of co-creation and capacity building (now reflected in their plans for GD2 engagement). We have also continued to stress the value that can be gained from true "deliberative" research when dealing with complex issues and SGN's research approach has evolved towards that model through the process.

At a more detailed level, while we were clear that responsibility for the quality of research sat with SGN we had agreed that, where timings allowed, we were happy to provide expert advice on research methodologies in advance (rather than simply criticising when it was too late). In many cases timings precluded us having an input but where we did, we were able to improve the quality of the research. For example, we challenged the nature of the options proposed for acceptability testing early in the process; we highlighted concerns about the complexity of supporting materials for some of the workshops; we raised concerns about the quality of facilitation by one research agency which prompted SGN to re-

tender; and we provided comments on the local authority questionnaire from a local authority expert perspective. We also highlighted issues with weightings on the initial willingness-to-pay research which led to the numbers being re-worked by the agency.

4. Driving more ambition in the plan

There are a number of areas where we challenged SGN to be more ambitious and where SGN subsequently strengthened its proposals. By linking the broad customer insights with the expert knowledge of CEG members we were able to identify areas where we knew customers would want SGN to do more (even if that had not directly come through the research). Examples included:

- Pressing from an early stage for more focus on de-carbonisation (including responding to the Ofgem consultation on the sector methodology given that we knew SGN's proposals would be shaped by Ofgem's decision);
- Pressing from an early stage for thought to be given to the handling of uncertainty about future volumes and the potential even in GD2 for there to be a shift away from gas for new builds (which led SGN to propose a volume driver for connections, to look at probabilistic CBAs to assess the stranding risk on projects and also to change the approach for its Long Term Development Statement to be more scenario based);
- Pressing for more to be done on leakage (where the final plan included a number of proposed actions beyond repex and pressure management – and where the accelerated repex proposal was re-instated);
- Pressing for more to be done on biomethane (where the final plan included a higher target and a steering group to keep the target under review);
- An early challenge on the lack of ambition on fleet de-carbonisation which initially SGN was planning to dismiss as not practical (where the final plan included a 50% target);
- Challenging the level of safety related spend given customer feedback that SGN should not spend more in this area (with SGN reducing that aspect of spend significantly from the July plan);
- Challenging the level of productivity assumed in the July plan (which was then increased in the October plan);
- Pressing for SIUs to be treated as an opportunity in the context of the future of gas rather than simply an expensive obligation (where the final plan included feasibility studies for biomethane and a potential hydrogen option and the re-tendering of Stornoway to include bio-LPG).

5. Clarity of the plan

Having a plan that is clear and easy to follow is important to enable stakeholders to engage (when the plan is published in December) and to help Ofgem in its task. By providing SGN with detailed feedback on its July and October draft plans we helped them get a clearer story and to ensure all substantive points were included in the main plan not just appendices.

6. Confidence in the outputs

Even where the outputs did not change as a result of CEG challenge, the fact that they had been subject to strong scrutiny by the group should provide Ofgem with added confidence. Areas where the CEG provided particular challenges but was ultimately satisfied include:

- The fuel poor network extension scheme target (once it was refined based on expert stakeholder input);
- The ambition for 9 out of 10 customer satisfaction (once it was clarified that the goal was "at least" 9 out of 10);
- The interruptions target (once additional evidence was provided on more recent trends).

Appendix 2- CEG Criteria for assessment of engagement

CEG Draft Assessment Criteria - Engagement	
Strategic	Reflecting the company's geographical regions, and its various network users – domestic and industrial.
Clear on objectives, scope and definitions	A consumer is a person who purchases or uses a good or a service – this is not the same as a citizen (tax payer), or a community (a geographical or interest based collective). A stakeholder generally represents a wider group of interests. Be clear about the "spectrum of participation" and difference between each part of that spectrum i.e. inform, consult, involve, collaborate, empower. Be clear about the scope of what you are asking and honest about any limitations or constraints. Where a decision has been taken not to engage directly with consumers or stakeholders on a particular issue, be transparent about this decision and the reasons for it.
Comprehensive	Consider consumer and stakeholder views across the full range of topics and on all aspects of the plan, rather than pre-determining their priorities or seeking to endorse your own priorities.
Timely	Thorough planning of the engagement programme allowing engagement at appropriate stages. Sufficient time needs to be allowed at each stage of engagement
Robust	Well-designed and executed to a high standard, using valid methods that are appropriate to the audience and issues. Ensure best practice is sought from other industries through literature reviews and wider engagement.
Representative	Ensure engagement covers all the different consumer segments affected by decisions e.g. potential current consumers, vulnerable and hard-to-reach consumers as well as future consumers. Also, be aware that the people who often participate are not always representative.
Inclusive	Ensure all consumer and stakeholder groups experience equality of opportunity in participating in engagement, and that methods are designed and executed in a way that ensures that all consumers' views are included.
Proportionate	Use of resources needs to reflect the benefit to consumers and stakeholders.
Appropriate - using a mix of methods that is appropriate for the research question	Consumers and stakeholders are more likely to give meaningful views if the engagement is designed in a way that makes it easy for them to understand the issues. Use the most appropriate engagement method for the research question. All engagement methods have limitations so a mix of methods is more likely to lead to robust results than a single method. Approaches also need to be tailored to suit the knowledge and awareness of different consumer segments and stakeholder groups. The opportunity for consumers and stakeholders to help co-create solutions is also more likely to mean they give more meaningful contributions.
Targeted - using a variety of communication channels, targeted to different groups of customers	Materials should be attractive, simple and informative. Work with consumers and stakeholders to gather the fullest range of interests. Understand and balance the differences between different consumer segments.
Joined-up	Ensure that participation, research and engagement methods are not treated in isolation and that one informs another.
Embedded	Ensure the engagement process is embedded across the business, with senior level buy-in, not just a stand-alone business planning/price control review exercise. Utilise consumer and stakeholder engagement as part of a continuous process allowing consumer views to shape business planning and priorities and provide feedback as they develop.
Responsive	Recognise that ever- changing and evolving consumer wants/needs will mean that engagement will need to be revisited over time, provide ongoing feedback and demonstrate impact.