

People's Vision for R&D

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Prepared for: Campaign for Science and Engineering (CaSE)



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Foreword

At the Campaign for Science and Engineering, we believe that Research & Development (R&D) can transform lives and livelihoods, and we work to champion R&D as a political and societal priority. As part of this, CaSE's Discovery Decade programme is supporting a behaviour change in how organisations and individuals advocate for R&D, with the aim of making R&D matter to more people.

Our public attitudes research shows that, while the public feel R&D is important, it is not seen as urgent. Many people view R&D as an abstract activity that they do not feel a personal, or strong, connection to. Broadening public support will mean moving people from a vague sense of arms-length approval of R&D, to a stronger relationship with the people, processes and places that make the system what it is. Establishing this connection requires action from the R&D sector and a shift towards a more society-centred vision for R&D in the UK; one that truly involves the public in everything from decision-making to the research itself.

The first step in developing such a vision is to understand where we are starting from. Do people feel any ownership or agency in R&D; do they feel they have a voice or influence? And would they want more of these opportunities? To explore these questions CaSE commissioned this public dialogue, and we have been grateful to work with the National Centre for Social Research and the National Co-ordinating Centre for Public Engagement on this process. Based on our conversations with R&D stakeholders and CaSE's own research, this dialogue focused on two aspects we believe will support a stronger connection between the public and the R&D system:

- 1. The public's emotional connection to R&D, which can offer a route towards a greater sense of ownership.**
- 2. Ways the public can be involved in R&D, whether through shared decision-making or participation in R&D itself, which can offer a route towards a greater sense of agency.**

At the outset of the discussions, it was clear that - although there was a general sense of approval for R&D - this held little resonance for many participants, but we were heartened to see their interest and enthusiasm grow throughout the deliberations. This demonstrates that an emotional connection can be strengthened through the opportunity to learn more about, and reflect on, both R&D and involvement in it.

The dialogue provided participants with a space to identify, discuss and agree on the approaches and behaviours they want to see from the R&D sector, brought together in the People's Principles for Involvement in R&D, and we are grateful to participants for their enthusiastic engagement throughout the process. Using these principles and wider insights, CaSE has developed practical recommendations for stakeholders across the R&D sector, which are set out in a companion report. We urge organisations and individuals across the R&D system to think about how they can apply these principles and recommendations in their own work.

If R&D is to become a political and societal priority, our sector must seize the opportunity to build a stronger, long-term relationship with the public. This connection between the public and the R&D community will rely on a sense of agency, ownership, and trust, which establishes the public as partners in our sector's advocacy. CaSE looks forward to working with others across the R&D sector to turn this vision into a reality in the years ahead.

Campaign for Science and Engineering

Executive Summary

To inform its Discovery Decade programme, the Campaign for Science and Engineering (CaSE) wanted to understand more about the extent to which the public feel ownership and agency in Research & Development (R&D). Therefore, CaSE commissioned the Centre for Deliberation at the National Centre for Social Research (NatCen) and the National Co-ordinating Centre for Public Engagement (NCCPE) to conduct an online public dialogue to understand how the public feel about increased opportunities for public decision-making, and involvement in, R&D.

Following input from five workshops with R&D stakeholders and an Expert Group, CaSE identified the following four research objectives for this study:

- Understand people’s emotional connection to R&D.
- Identify principles for involvement in R&D.
- Understand the motivators and barriers to getting involved in R&D.
- Understand what the public value about involvement in R&D.

The dialogue brought together a diverse group of 33 people from across the UK in May 2024 to respond to these objectives and start to specify a society-centred vision for involvement in R&D.

Participants took part in ten hours of dialogue across four online sessions. They heard information from CaSE and other R&D specialists across the first two sessions before developing a set of People’s Principles for Involvement in R&D in the second two sessions. All workshops were facilitated by NatCen and NCCPE.

This report draws on data from participants’ contributions to digital whiteboards, facilitator notes and pre-/post-surveys that they filled out as part of the dialogue. It outlines participant’s final agreed principles, which reflect their emotional connections, discussions on motivations and barriers to involvement, as well as what they saw as the value of the public’s involvement in R&D. The report also shows how participants’ connections with R&D evolved over the course of the dialogue.

Key findings

During the dialogue, participants began by feeling largely ambivalent towards R&D and the public’s involvement in it, with some expressing excitement and others some fear or distrust. By the end of the dialogue, participants were largely positive about the same topics, with almost no ambivalence and a reduction in fear or distrust. This evolution appears to have resulted from two things: the positive experience of involvement in *this* dialogue process and learning more about the range of ways the public are involved in R&D already.

These two elements in turn shaped the People's Principles for Involvement in R&D developed by participants which are detailed in full below. In particular, the principles highlight the importance of increasing awareness of involvement in R&D through communicating the benefits for participants, researchers, and wider society. Underpinning these benefits was the idea that public involvement should use the public's expertise to add value for society. The People's Principles show what would increase connection with, and trust in, R&D, as well as reduce participants' concerns that involvement could be tokenistic. For clarity, references to 'participants' in these principles refer to any participant in a hypothetical case of public involvement in R&D, rather than to the participants in this dialogue process itself. References to 'public' refer to the general public.

The People's Principles for Involvement in R&D

What is involvement for?

1. Public involvement in R&D should use the public's expertise to benefit the participants, the research and wider society.

- Researchers benefit when they really hear and listen to the public.
- The public gain knowledge and skills when they are meaningfully involved.
- The community benefits from the R&D at the end of the project.
- For this to happen, the right amount of time, money and energy needs to be invested in involving the public.

What do people need to know?

2. Public involvement in R&D should provide everything that participants need to feel properly informed.

- Honesty about the purpose of involvement and how the public's views will be used will help to build trust.
- Transparency about who funds the project, and why, will help to build trust.
- The public should hear the results, so they know the impact of their involvement.
- All information should be clear so that people feel informed rather than overwhelmed.

Who needs to be involved?

3. Public involvement in R&D should involve the right number of people with a range of experiences.

- A diverse group of people brings a range of experiences and perspectives to the research.
- Involving people with the right experience means researchers can learn from the public's expertise.
- The number of people involved needs to match the scope of the project, so the public have confidence in the results.
- Researchers should make opportunities for involvement accessible, well-known, and make sure no one is excluded.

How should involvement feel?

4. Public involvement in R&D should ensure that participants feel safe, heard, and invested in the research.

- Participants need to trust the integrity of the process.
- Participants need to feel confident that their views and data are handled responsibly.
- Participants need to feel safe to share their experiences and engage with new research.
- Participants should feel invested in the opportunity.

Familiarity with involvement increases positivity towards R&D

To understand their connection with R&D, participants were asked which words they associate with it, and facilitators then probed to understand the emotions associated with these words. NatCen asked these questions at the start and end of the dialogue to understand how connections evolved.

At the start of the dialogue, participants associated R&D with more functional words (for example, surveys, information, and products). By the end of the dialogue participants used more words that highlighted the *benefits* of R&D (for example, progress, improvement and worth). This shift in word association suggests that after people learnt more about involvement in R&D, participants linked R&D to making society better rather than perceiving it as about abstract scientific processes.

This shift in meaning was mirrored by an increased positive emotional connection. At the start of the dialogue most participants struggled to associate a feeling with R&D, although some did name fear and others excitement. These three emotional responses (ambivalence, excitement, and fear) reflected a lack of awareness amongst participants around what involvement in R&D really means. In the final session participants were prompted to consider how they would feel about R&D if the People's Principles were applied by the R&D sector. In this final exercise, most participants named a positive emotion that highlighted how worthwhile and essential R&D now felt to them. Optimism and excitement replaced ambivalence and fear.

Personal and social motivations for involvement

After developing the People's Principles, facilitators asked participants what might motivate them and others in society to get involved in R&D. When thinking personally, people were motivated by projects they found interesting, which contributed to feelings of being invested. People were also motivated by the opportunity to learn, which many participants reported as an unforeseen benefit of taking part in this dialogue process, and therefore anticipated this would be a benefit of other R&D involvement opportunities. Finally, people were motivated to participate in opportunities that benefit wider society, as reflected in the first and final principles.

Barriers of awareness and access

Participants highlighted accessibility and awareness as two underlying barriers to getting involved in R&D. For opportunities to be genuinely accessible the R&D sector must address the key challenges people face, such as digital exclusion, literacy, time commitment, and whether some knowledge of a particular R&D topic is needed for people to meaningfully participate. A lack of awareness about opportunities for involvement in R&D was a recurring barrier highlighted in the dialogue. Together, these barriers speak to the principles in a number of ways, but particularly the first principle's attention to investing resources in involving the public, and the second principle's attention to involving those with the right experience and ensuring people feel informed about what they are participating in.

The value of involvement is better R&D

In the final dialogue session, participants discussed the value of increasing opportunities for the public to be involved in R&D.

Across the dialogue, participants heard about the benefits and challenges of involving people in R&D projects from external speakers. In the final session, CaSE also introduced some of the challenges facing those who are advocating for a step change in the public's access to, and influence over, R&D in general. Facilitators then asked participants, given what they now knew about involvement in R&D, how *they* would advocate for more R&D involvement to both the R&D sector and the general public. Through analysis of these responses, we observed three key arguments that participants made about what they saw the value of involvement to be.

The first argument highlighted the value of the **public bringing through their own expertise**. This evolved over the dialogue, as some participants initially wondered whether they would feel able to contribute because of the perceived technical and scientific nature of R&D. However, by the end of the dialogue, most saw the public as bringing particular expertise that researchers need, such as lived experience or a fresh, non-technical perspective on the issue researched. This led to a second argument that emphasised how there would be value in **researchers learning from the public**, both in terms of improving their research and learning how to communicate their work to a lay audience. These threads came together in a final key argument: that the value of **involving the public is ultimately better R&D**. These arguments also underlined for participants the importance of high standards for public involvement that avoid tokenism.

Participants felt that the R&D sector should involve the public more and, when it does so, should now follow the People's Principles. They felt doing so would make for better R&D and would over time only improve public involvement in R&D as the sector learnt more about how to run processes that aligned with the People's Principles.

“I think public involvement is essential [...] as well as informing the public, allowing them to air their views and contribute their experience, it also gives researchers insight into the potential impact of their studies in perhaps ways they hadn't thought of.”

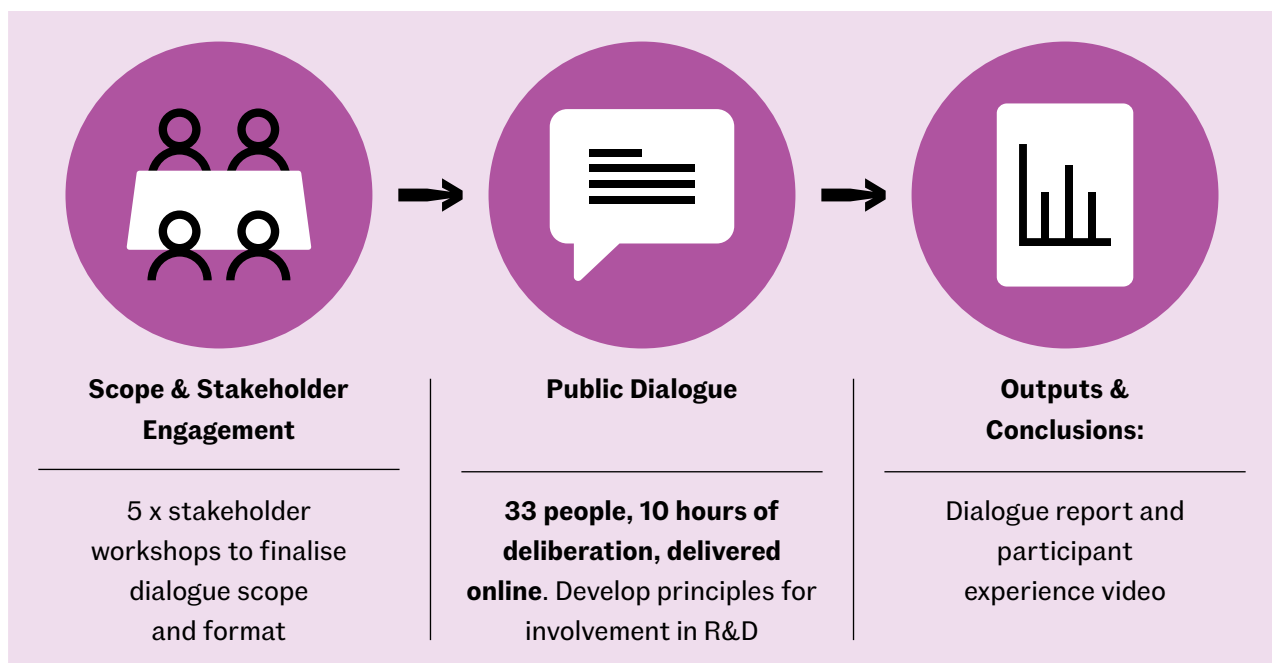
- Female, 63, Birmingham

1. Introduction

1.1 Context and objectives

To inform its Discovery Decade programme, CaSE commissioned the Centre for Deliberation at the National Centre for Social Research (NatCen) and the National Co-ordinating Centre for Public Engagement (NCCPE) to conduct an online public dialogue. Through this dialogue, a diverse group of 33 people from across the UK took part in ten hours of deliberation to explore how the public feel about increased opportunities for public decision-making about, and involvement in, R&D. Figure 1. below summarises the process and outputs of the public dialogue, including a scoping stage where the objectives were refined in consultation with stakeholders, a delivery stage where fieldwork took place, and an outputs stage where results were communicated through this report and an accompanying video documenting participants' experience.

Figure 1. The People's Vision for R&D public dialogue process.



Following the scoping stage, the following research objectives were identified:

- Understand people's emotional connection to R&D.
- Identify principles for involvement in R&D.
- Understand the motivators and barriers to getting involved in R&D.
- Understand what the public value about involvement in R&D.

The focus of the final objective evolved during the dialogue sessions. Initially, this focused on trying to understand what the public thought was important by exploring trade-offs; for example, involving smaller, targeted populations or larger, nationally representative populations. However, during the dialogue it was clear that participants would need more time and information to grapple with these sorts of considerations. Therefore, the focus was simplified to explore what the public understand the value of involvement in and of itself to be after learning more about it, in order to inform CaSE's advocacy work.

1.2 The dialogue method

Sciencewise defines public dialogue as bringing members of the public together with subject specialists to learn about a complex topic over an extended period, before using that new understanding to deliberate and make decisions.¹ This type of deliberation can yield insights into people's considered views on complex, value-driven issues that often require trade-offs for resolution. This is because participants are provided with the time, information and discursive conditions needed to engage with a topic *in depth*. Facilitators prompt participants to exchange reasoning so they can develop their opinions on a subject. Researchers capture this reasoning and the information that informs it so we can understand why and how people's opinions evolve. The outputs of deliberative processes can vary. In this research, NatCen supported participants to develop a set of principles for public involvement in R&D, to inform CaSE's policy recommendations.²

1.3 Scope and stakeholder engagement

To provide independent advice to this project, CaSE convened an Expert Group to consult on the design, selection of speakers and interpretation of key findings (see the separate appendix document for details of members).³ This Expert Group met on five occasions to discuss the project proposal before and after tendering, and review the final research objectives, draft session overviews and emerging key findings.

To refine the objectives of the dialogue with the public participants, CaSE first convened five workshops with stakeholders from across the R&D sector, hearing from around 50 organisations in total. Led by CaSE with support from NatCen and NCCPE, the first took place online with stakeholders from across the UK and the remainder were face-to-face in London, Manchester, Glasgow and Cardiff. All workshops covered the same topics, to gather stakeholder perspectives on the priorities, barriers and solutions that could help build a stronger relationship between the public and the R&D system. CaSE also invited stakeholders to share examples of existing practice where the public have influence, agency, or ownership in R&D, to gather case studies that could be used in the dialogue. The sessions concluded with stakeholders sharing their thoughts on what outputs would be most useful for the R&D sector from this dialogue. CaSE published a summary of the workshop outcomes in April 2024.⁴

1 Sciencewise (2019), The Government's Approach to Public Dialogue on Science and Technology, available at: [Guiding-Principles.pdf \(sciencewise.org.uk\)](https://www.sciencewise.org.uk/Guiding-Principles.pdf)

2 To see CaSE recommendations, visit: www.sciencecampaign.org.uk/what-we-do/public-opinion/peoples-vision-for-rd/.

3 This report's appendices can be found at: www.sciencecampaign.org.uk/what-we-do/public-opinion/peoples-vision-for-rd/.

4 CaSE (2024), People's Vision for R&D: Stakeholder Workshops Report, available at: www.sciencecampaign.org.uk/analysis-and-publications/detail/peoples-vision-for-rd-stakeholder-workshops-report/.

Across these workshops, stakeholders highlighted what they thought would be a challenge of exploring such a broad and unfamiliar subject as R&D with the public in a relatively short space of time (ten hours of online dialogue). To address this challenge, the research objectives were refined from an original focus on understanding public attitudes towards ‘agency and ownership’ of the R&D sector, to their attitudes towards public ‘involvement’ in R&D specifically. To maintain the link between public involvement in R&D and agency and ownership, CaSE decided to focus on involvement in decision-making about R&D, or participation in R&D itself.

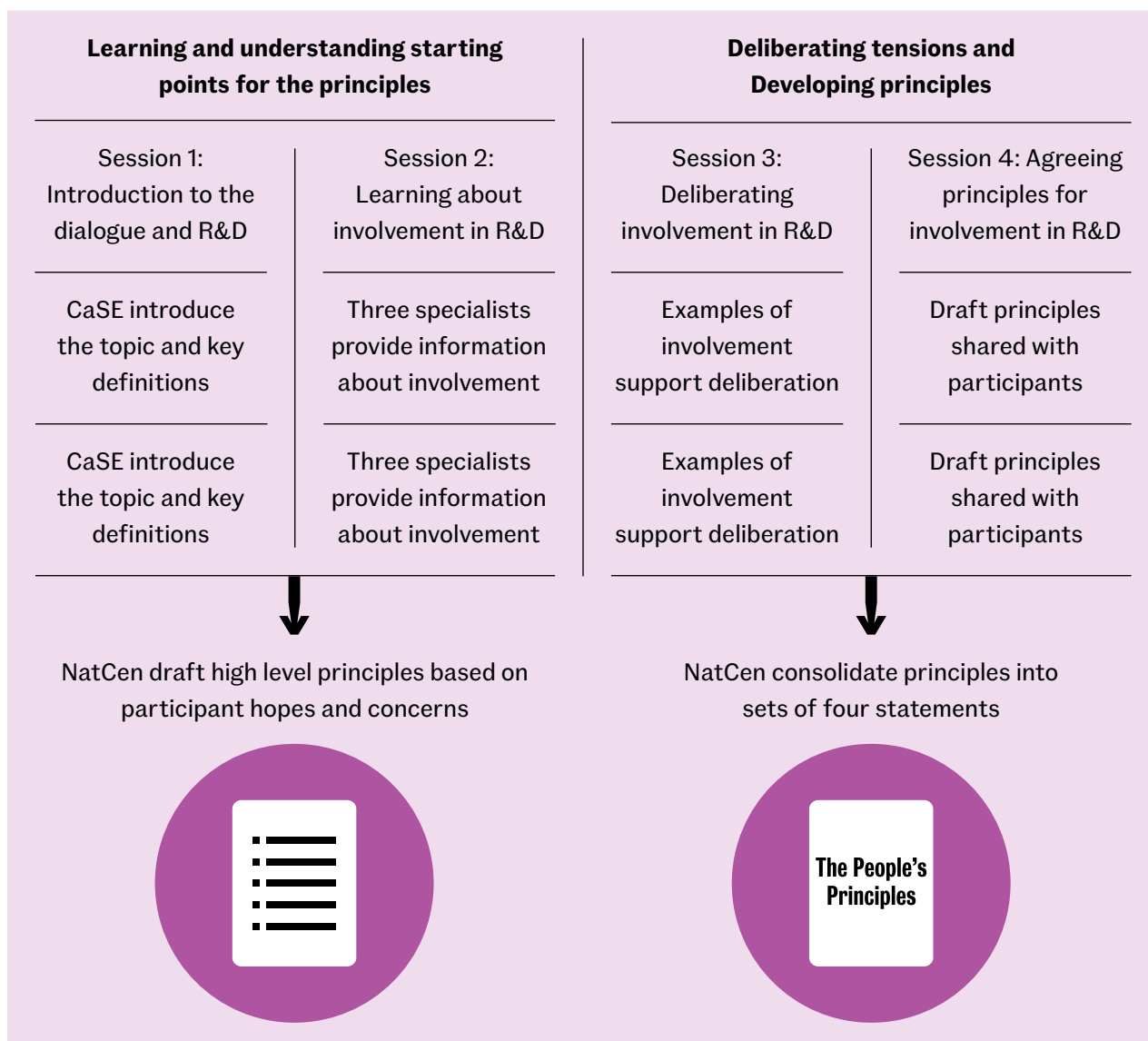
1.4 Dialogue delivery

NatCen ran four online Zoom sessions (see Figure 2.) where participants heard information in a plenary session before moving to breakout room discussions of between five and eight people facilitated by NatCen and NCCPE.⁵ Sessions one, two, and four took place on weekday evenings, while session three was held on a Saturday during the daytime. Fieldwork took place between 8-29th May 2024. Within this period, there were no significant events relating to R&D in wider society which were likely to have influenced the content of people’s deliberations.

Figure 2. shows the objectives, information provided, research output and length of each session. Sessions one and two focused on learning about R&D and involvement and understanding people’s initial associations with R&D. Sessions three and four focused on developing principles for involvement.

5 For information about speakers’ presentations, visit this report’s appendices at: www.sciencecampaign.org.uk/what-we-do/public-opinion/peoples-vision-for-rd/.

Figure 2. People’s Vision for R&D dialogue session objectives and outputs.



Session one introduced participants to the dialogue topic and process. CaSE, as subject specialists and commissioners introduced the motivation and scope for this project before providing clear explanations of the following concepts: R&D, public involvement in R&D, the R&D sector, the research cycle and where involvement in R&D takes place.⁶ NatCen facilitators supported participants to explore their initial connections to R&D through a series of word association exercises and clarifying questions.

6 The definition provided to participants for ‘R&D’ was: work that aimed to solve a problem or increase what we know, which can lead to new discoveries or the invention or improvement of products and services. Furthermore, the R&D sector was defined to participants as made up of organisations such as universities, businesses and charities, and the people who work in them. They could be working to develop, for example, new medicines and vaccines; new ways of generating clean electricity; or better solutions to help people affected by the cost-of-living crisis. CaSE explained to participants its broad view of R&D, covering disciplines from STEM (science, technology, engineering and maths) to social sciences, the arts and humanities. For further detail on definitions provided, please visit this report’s appendices at: www.sciencecampaign.org.uk/what-we-do/public-opinion/peoples-vision-for-rd/.

In session two, participants began to develop their views on involvement in R&D by hearing from other specialists. At the start of the session, NatCen presented themes from the first session's word association exercises to show how participants connect with R&D. Then, participants heard from three speakers representing different parts of the R&D sector, who shared their experiences of and perspectives on public involvement in R&D. NCCPE then moderated a plenary session in which participants could put questions to speakers. The speakers in session three were:

- **Hannah Collins**, Associate Director, Engagement and Futures Programmes at the Natural Environment Research Council. Hannah outlined what funders think about when it comes to public involvement in research.
- **Natalie Wall**, Research Impact Lead for Social Sciences at King's College London. Natalie spoke about supporting academics to involve the public in research.
- **Charles Bradshaw-Smith**, Co-CEO and Operations at SmartKlub, a company that works on creating renewable energy schemes and is a partner on a community energy project called the Trent Basin Energy Scheme. Charles spoke about businesses involving the public in research.

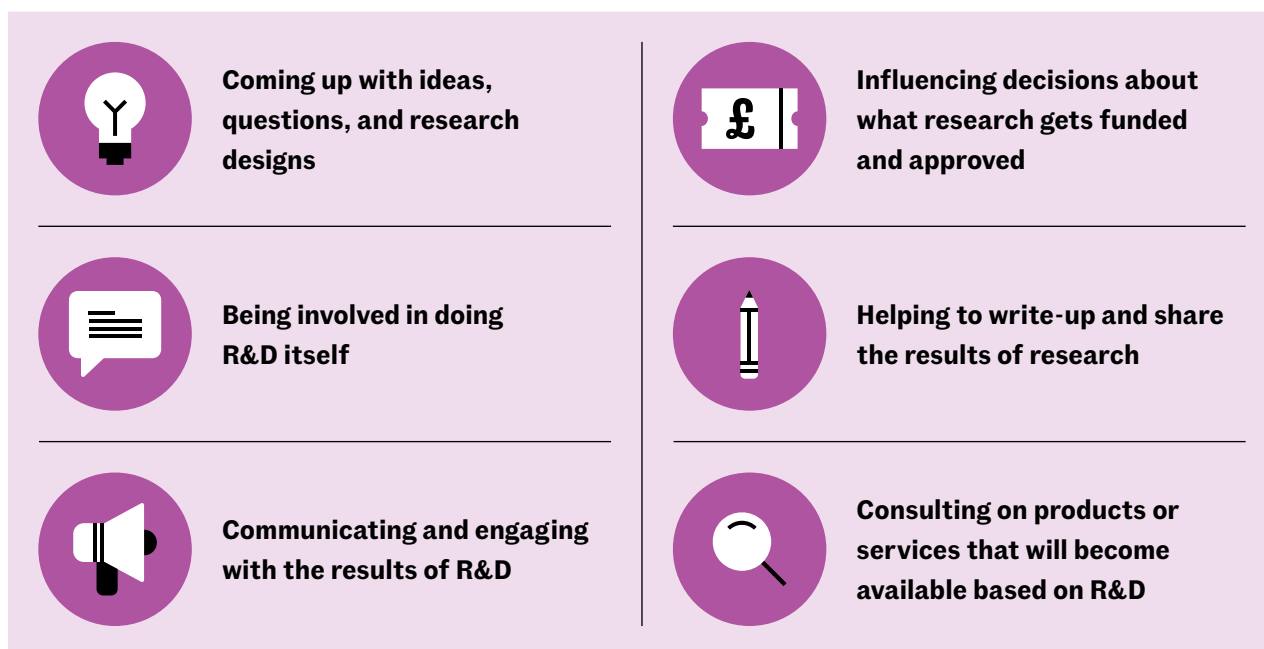
After hearing from these speakers, NatCen facilitated breakout room discussions where participants began the process of developing principles. They named their hopes and concerns for public involvement in R&D and completed sentences such as 'Good involvement in R&D is...' and 'Bad involvement in R&D is...'. Through these exercises facilitators encouraged participants to reflect on their connection with R&D and the information provided by specialists in these discussions.

In between sessions two and three, NatCen analysed the responses to these sentence completion exercises to develop five draft principles.

In session three, NatCen presented these five draft principles to participants and asked them to review them during the session. The principles addressed areas such as who should be included in R&D projects and what needs to be communicated to people being involved.⁷ To help this process, NatCen gave participants details of existing public involvement projects to help them deliberate what these principles could mean when considered in practice. For example, they examined a health research project, Our Future Health, where adults in the UK share health data that can be used by medical researchers. This example helped people think through what it means for public involvement in R&D to be transparent (among the other draft principles) – through focusing on details of how Our Future Health ensure this in their work. The projects participants explored were chosen to illustrate the range of ways the public can be involved in R&D at different stages of the R&D cycle.

⁷ For a full breakdown of the draft principles, visit this report's appendices at: www.sciencecampaign.org.uk/what-we-do/public-opinion/peoples-vision-for-rd/.

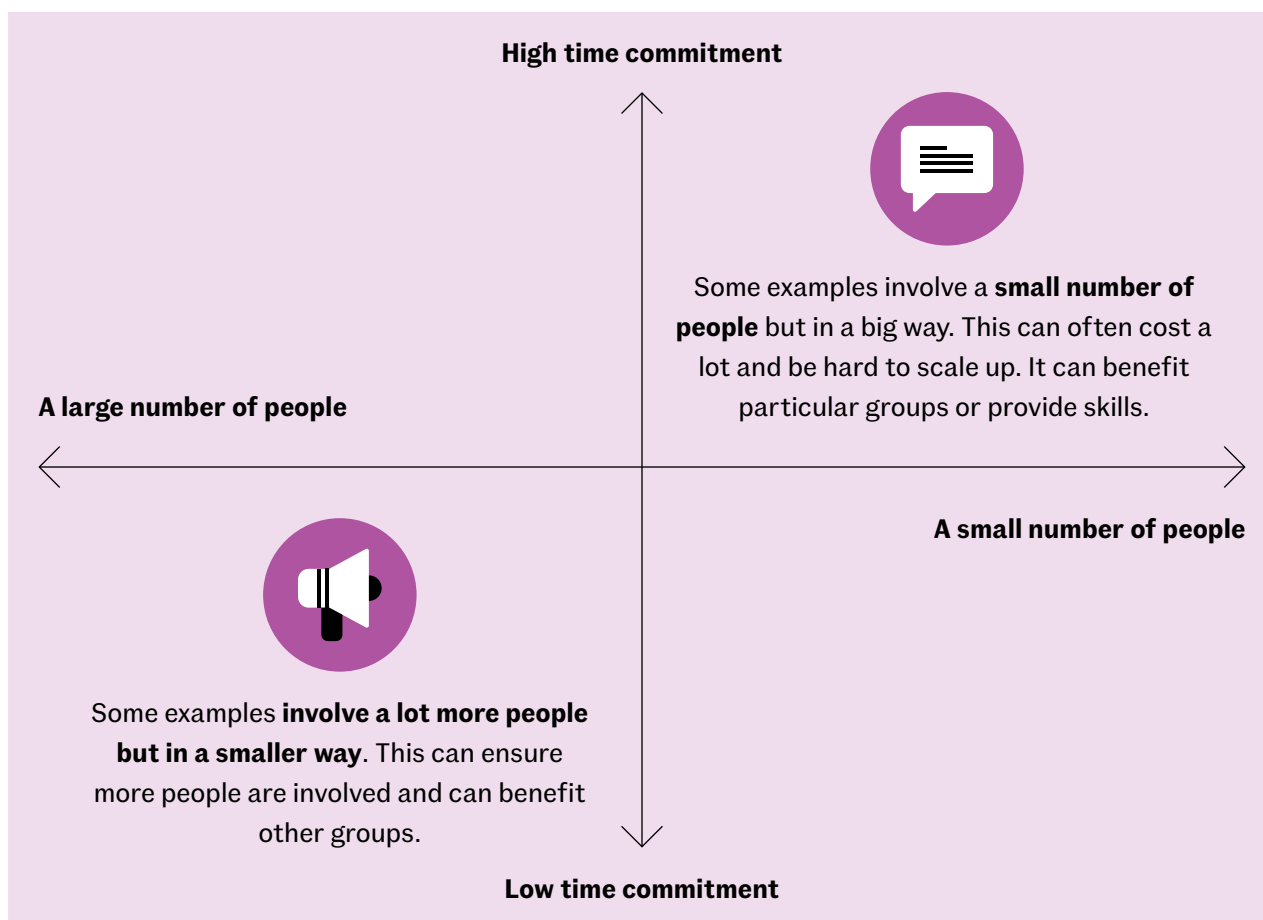
Figure 3. The examples participants looked at in the dialogue illustrated the range of ways the public can be involved in R&D.



A total of 11 project examples were used, with each breakout room looking at six. The examples all covered two basic reasons to involve the public. Some involved the public in shared decision-making about R&D (for example, to inform government policy about the future of transport); and others involved the public in R&D itself (for example, by collecting data about pollution). They also reflected a range of sample sizes and trade-offs in involvement (see figure 4 below). Some projects required high time commitment from a small number of people (for example, by sitting on an ethics committee for six months). Others required a lower or flexible time commitment for a larger number of people (for instance, through a citizen science project that involved digitising historic weather records). Through these varied examples participants were familiarised with tensions that the R&D sector faces when deciding the size and format of public involvement in their projects.⁸

⁸ For a full breakdown of the examples considered, visit this report's appendices at: www.sciencecampaign.org.uk/what-we-do/public-opinion/peoples-vision-for-rd/.

Figure 4. The examples of involvement in R&D highlighted the following tension.



At the end of the session, in light of their discussions on real life project examples, each breakout room wrote a sentence that revised and detailed each draft principle for involvement. This then created five different versions of each principle.

In between sessions three and four, NatCen consolidated the different versions into one; producing an updated 'People's Principles for Involvement in R&D'. In session four, participants reviewed and agreed that this updated version captured everything they thought was important. They also reflected again on their connection to R&D. At the end of the session, CaSE then presented their reflections on these agreed principles, recognising that while some spoke to existing R&D best practice, there were often barriers to implementing them consistently across sectors and disciplines. CaSE also outlined some of the tensions they thought may pose a challenge to those advocating for, or seeking to implement, the People's Principles. Facilitators asked participants to reflect on these challenges and identify what they would emphasise to the R&D sector as the value of increasing the opportunities to be involved in R&D, as well as the barriers and motivations which people may face in getting involved in R&D.

To also understand how participants' views evolved across the dialogue, they completed a short survey before the first and after the last session. This survey asked the same questions to understand their associations with R&D as well as their views on the importance of public involvement in R&D.

1.5 Sampling and recruitment

In total, 33 participants took part in the dialogue. NatCen developed quotas to ensure the sample was diverse in terms of demographics, access to, and awareness of R&D, and political leaning. Quotas were set using a combination of figures from the 2021 Census, the Office for National Statistics, the House of Commons Library, CaSE's previous polling, and NatCen's British Social Attitudes survey.⁹ The considerations used to build the quotas were:

- **Reflecting the UK population:** Deliberative processes bring together a 'mini-public' to ensure a group of people who reflect the wider population that will be impacted by a topic are involved.¹⁰ Therefore, we set demographic quotas to ensure that the sample reflected the diversity of the UK population in terms of gender, social grade, region, city/non-city location, education, ethnicity and disability/long-term illness. To anticipate known areas of likely attrition, younger participants, and those from racially minoritised groups, were overrecruited.
- **Access to R&D:** The Sciencewise public dialogue principles highlight the need to include publics that are particularly impacted by the issue being discussed.¹¹ Insights from CaSE, the Expert Group and R&D stakeholders suggested that location impacts the public's access to R&D involvement opportunities because those in city centres and the South of England have greater access to R&D. Therefore, lower quotas were set for the South of England and higher quotas for those living outside of city centres. Higher quotas were also set for those with no qualifications or from the three lowest social grades, on the basis that these individuals are more likely to face barriers accessing R&D institutions.
- **Knowledge and experience of R&D:** A key feature of deliberation is that participants have shared information about the topic under discussion. As such, it is normal to exclude people who have higher than average knowledge of a topic, to ensure that the views expressed are more reflective of the general public. Therefore, we sought to screen out people working in the R&D sector in active research roles, following the advice of CaSE and the Expert Group.¹² To ensure a range of familiarity with the term R&D, quotas were set to reflect national trends using CaSE's polling data.

9 For a full breakdown of quotas and the achieved sample, visit this report's appendices at: www.sciencecampaign.org.uk/what-we-do/public-opinion/peoples-vision-for-rd/.

10 For further information on this concept, see: Escobar, O., Elstub, D. (2017), *Forms of Mini-publics*, available at: newdemocracy.com.au/docs/researchnotes/2017_May/nDF_RN_20170508_FormsOfMiniPublics.pdf.

11 Sciencewise (2019), *The Government's Approach to Public Dialogue on Science and Technology*, available at: [Guiding-Principles.pdf \(sciencewise.org.uk\)](http://sciencewise.org.uk/Guiding-Principles.pdf)

12 One participant was recruited who it was later discovered is active in research. This occurred due to their role falling outside of the list of occupations to exclude. However, we are confident that this did not affect the research, nor the principles developed, for three reasons. Firstly, we met our quotas for different levels of familiarity with R&D in the sample. Secondly, the sought balance of familiarity was reflected in multiple parts of the findings; for example, the lack of connection expressed by the majority of people at the start of the dialogue, their stated unfamiliarity in the pre-survey, and their stated journey of learning about R&D by the close of the dialogue. Thirdly, the design of the workshops and the nature of the facilitation diminished the influence any one participant could have.

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- **Political leaning:** To ensure the sample reflects a range of underlying values, we set quotas to ensure a mix of people with different political leanings took part. This approach is in line with the UK Climate Assembly evaluation report, that emphasised the importance of ensuring deliberation takes place with a mix of political leanings.¹³ Specifically, we set quotas on which party people feel closer to using NatCen’s British Social Attitudes survey (Northern Ireland quotas reflected the major party representation in the Northern Irish Assembly’s Executive and Official Opposition at the time of recruitment). This was used in place of election results to set quotas, as these can be limited by turnout (that is, they tend to reflect trends in 30-60 per cent of the population).

NatCen recruited participants via its Opinion Panel, Britain’s longest-running random probability-based panel. NatCen’s Telephone Unit (TU) contacted people registered on the panel to invite them to take part in the project. The TU then interviewed those who expressed an interest to confirm their information. To ensure informed consent, an information sheet and privacy notice provided details of the project.

1.6 Approach to analysis

NatCen researchers collated and then inductively coded participants’ contributions to a digital whiteboard tool used in the dialogue’s sessions. Inductive coding is where researchers analyse qualitative data with no preset themes but instead identify themes that emerge from close reading of the data. Once all the data had been coded NatCen researchers identified the most common themes that related to the research objectives, to report key findings in people’s connection to R&D, the motivators and barriers to getting involved in R&D and the value of public involvement in R&D. Further analysis looked at data generated from a pre-/post-survey to understand how participants’ attitudes developed across the dialogue, and notes taken during debriefs with facilitators following the sessions.

13 Elstub, S., et al (2021), *Evaluation of Climate Assembly UK*, available at: [evaluation-of-climate-assembly-uk.pdf](https://www.parliament.uk/evaluation-of-climate-assembly-uk.pdf) (parliament.uk)

1.7 Interpreting the findings

This dialogue generated a set of 'People's Principles' that emphasised the importance of increasing awareness of opportunities to be involved in R&D. When in place, participants thought these principles could increase connection with, and trust in, R&D. Readers should interpret these findings with the following context in mind.

Participants began with a relative lack of awareness of involvement in R&D which meant they held fairly neutral opinions towards the subject at the start of the dialogue. It was clear at the start of the process that participants were unaware of the range of ways people are, and can be, involved in R&D; yet in the pre-survey the vast majority thought it was important to involve the public in R&D. We can interpret this baseline attitude as a general predisposition towards involving the public, and therefore it is unlikely any participants held strong existing opposition towards involvement.

CaSE provided participants with definitions of terms which they may have been familiar with but have different understandings of, like 'R&D,' and terms that they may have been unfamiliar with, such as 'involvement in R&D.' Therefore, findings from deliberative processes such as these give us confidence that participants understood those terms for their discussions but also that in doing so, they reflect the views of more 'informed' publics than other forms of research, such as focus groups and surveys.

Participants reported a positive experience of the dialogue itself, which may have shaped their perception of what it is like to be involved in R&D more generally. Throughout the dialogue, participants referenced this process as an example of involvement in R&D. For many it was their first and only knowledge of involvement in R&D, and the dialogue therefore acted as an important reference point for the benefits and challenges of being involved in R&D.

Sciencewise principles highlight that public dialogues should provide participants with a range of perspectives as well as clarity about what is in and out of scope.¹⁴ CaSE chose to set the scope of the dialogue to be concerned with what public involvement in R&D ought to be like, on the assumption that opportunities for this *should* be increased. NatCen and NCCPE agreed on this focus with CaSE and the Expert Group given the purposes of the dialogue in the context of CaSE's Discovery Decade programme. However, CaSE acknowledged this decision at the start of the dialogue and explained to participants that they were welcome to disagree with this starting assumption in the process of the dialogue. Given this scope, participants did not hear from a speaker who presented arguments for why the public should not be involved in R&D at all. Speakers from different parts of the R&D system explained why they believed involving the public is valuable but also highlighted some of the challenges in doing so, both for the public themselves (such as constraints on the time they can give to being involved) and for the R&D sector (such as the impact this has on the funds available for other kinds of research). Nonetheless, the choice of scope for this dialogue will have influenced participants' views.

14 Sciencewise (2019), *The Government's Approach to Public Dialogue on Science and Technology*, available at: [Guiding-Principles.pdf \(sciencewise.org.uk\)](https://www.sciencewise.org.uk/Guiding-Principles.pdf)

2. Awareness

increases connection to R&D

2.1 Key findings

This chapter draws on analysis of word association exercises, facilitator reflections, and survey responses to describe how participants' connection with R&D evolved over the course of the dialogue. It highlights how word associations with R&D shifted from describing what R&D is at the start, to how it impacts society at the end of the dialogue. Our analysis suggests that this move from abstraction reflects an increased connection with R&D for most participants by the end of the dialogue; likely explained by participants coming to a more informed view of existing public involvement in R&D as well as having a positive experience in this dialogue.

2.2 Method and information shared

NatCen worked on the basis that participants' connections to R&D could be illuminated through exercises that aim to understand what R&D meant to them and how they felt about it. To elicit these connections and track how they evolved through the dialogue, NatCen used word association exercises to understand what R&D means to people, and projective questions with image stimuli to understand how it makes them feel.¹⁵

In the pre and post-surveys participants were asked what words they associate with 'R&D'; these were then shown to participants in session one where they were asked to name the *feelings* they associated with them. They were also shown images that represented a broad range of possible connotations with R&D – such as lab coats, plants, and museums. This allowed facilitators to further probe for feelings in relation to these images. In the last session, participants carried out a sentence completion exercise that asked 'If I knew R&D projects that involved the public fulfilled [the People's Principles] I would feel...'

¹⁵ See: The Association for Qualitative Research, 'Word association', available at: www.aqr.org.uk/glossary/word-association; 'Projective and enabling techniques', available at: www.aqr.org.uk/glossary/projective-and-enabling-techniques.

Responses to these exercises were captured on a digital whiteboard and then inductively coded by NatCen researchers to understand how the public's connection with R&D (the meaning of R&D and feeling associated with it) evolved after learning more about *involvement* in R&D.

2.3 From what R&D is to how it impacts society

Analysis of the words participants associated with R&D in the dialogue pre- and post-surveys (see figure 5 below), show how the dominant meaning evolved from describing R&D's practices to its impacts on society.

Figure 5. Participants' word associations with 'R&D' at the start of the dialogue (left) and following the end of the dialogue (right). The larger words signify more people said them.



At the start of the dialogue, words that described practices associated with R&D were popular – such as ‘surveys’ and ‘experimentation’. Words that were synonyms for R&D, such as ‘science’, or the end product, such as ‘information’, were also common. By the end of the dialogue participants used more words that represented potential benefits of R&D, such as ‘progress’, ‘improvement’ and ‘worthwhile’. This shift in meaning perhaps also reflects an increased connection with R&D because it shows participants are focussed on how it can improve their lives rather than what the practices, or processes, of R&D are.

“Supporting R&D helps us to address big societal questions and issues and work to find solutions or work on new ideas that can make life better.”

- Female, 28, Nottingham

The word ‘innovation’ remained popular at the start and end of the dialogue, suggesting that people held this as a predominant association. As expanded on below, this word is likely a positive association and drove feelings of excitement amongst some participants. For others it may have reflected an association with science and technology. The prominence of this word aligns with CaSE’s previous public attitudes research that has explored the different terms used to talk about the activities that fall under the broad banner of research, development and innovation. This found that ‘science’, ‘technology’, ‘innovation’, and ‘research and development’ all generate positive connotations and are used quite naturally and often interchangeably by the public.¹⁶

2.4 From ambivalence to positivity

Analysis of the feelings that people associated with these words suggests that participants moved from feeling largely ambivalent towards R&D at the start of the dialogue, with some expressing excitement and others some fear or distrust, to feeling largely positive about it at the end of the dialogue.

When prompted by facilitators in session one, many struggled to think of a feeling, which suggests they did not feel emotionally connected to R&D. Participants instead mentioned professions or institutions they associated with the R&D sector (in particular science, but also medicine and academia). Some elaborated that these sites of R&D felt irrelevant or disconnected from their lives; this supports CaSE’s wider public opinion research that the people, processes and places linked to R&D feel opaque to many members of society.¹⁷ In a handful of cases, people referred instead to the ‘end products’ of R&D, such as pharmaceuticals.

Despite the difficulty most faced in ascribing feelings, some participants identified excitement, fear, and mistrust towards R&D at the start. Some were excited about what future advancements in R&D could lead to, for example, feeling that it gave them ‘positive thoughts of advancement.’ Elsewhere, people articulated excitement via a more general sense of interest, intrigue, and curiosity about R&D itself. Others linked this to benefits for society; as one participant put it, R&D made them feel ‘like something important will be solved’ and that it could help us ‘live longer and healthier lives.’ The feeling of excitement also links here to the use of the word innovation that remained prominent at the start and end of the dialogue. People also expressed fear of the potential harmful (often unintended) consequences from R&D. A minority mentioned distrust of R&D rooted in, for example, a lack of clarity over who funds research projects.

Participants were asked to name the feelings they associated with R&D again in the final session. People found this easier at this stage and in contrast to the predominantly ambivalent response they had, by the final session most participants named a positive emotion in relation to R&D itself, such as ‘exciting’, ‘vital’, or ‘beneficial’, which highlighted that R&D now felt worthwhile and essential to them. Participants were also asked in the final session how they would feel if the People’s Principles for Involvement in R&D were applied by the R&D sector, and here too they named positive emotions. For example, one person stated that if this were the case they would be ‘happy to go ahead and participate.’ In general, optimism and excitement had come to replace feelings of ambivalence.

¹⁶ CaSE (2023), ‘Terminology’, available at: [Terminology - CaSE \(sciencecampaign.org.uk\)](https://www.sciencecampaign.org.uk/terminology)

¹⁷ Ibid.

Based on analysis of survey responses, facilitator reflections on discussions, and participant contributions to the exercises examined in this chapter, our assessment is this evolution resulted from participants' increased awareness of what public involvement in R&D is, as well as their positive experience of taking part in the dialogue itself (see 2.5 below). At the start of the dialogue participants' levels of awareness of R&D reflected national trends, with around half claiming to have heard of R&D and knowing what it means, and half being unsure of what it means.¹⁸ When participants responded to CaSE's definitions in the opening session it was clear that the key terms of R&D were somewhat familiar to most participants, but most were surprised to learn about the range of topics and sectors as well as the different points in the research cycle when the public can be involved. Between sessions two and four, participants learnt more about the range of ways the public can be involved, which led to more excitement towards R&D and the public's involvement in it. They also developed principles for public involvement in R&D, which they explained if implemented would help reduce feelings of fear and concern towards R&D and the public's involvement in it.

2.5 The dialogue experience

This evolution of positive feeling towards R&D, an interest in its future, and the public's role in this, resulted partly too from their experience of involvement in the dialogue process itself. Facilitators reflected that participants had remained engaged in the process from the start, and the post-survey indicated that participants had a positive experience of the dialogue. Of the 31 responses, 29 stated they had enjoyed it 'a great deal' or 'quite a lot' and just two responded 'to some extent'. Reflections from facilitators suggest that there were three elements that contributed to people's positive experiences:

- **Learning:** This was an unexpected benefit for many participants. Many people expressed a curiosity to learn about different examples of, and perspectives on, public involvement in R&D early on in the dialogue. Thus, they reported enjoying the experience of learning about the subject in subsequent sessions from specialists as well as learning from others in the dialogue.
- **Participation:** Many people enjoyed the wider process of taking part in the dialogue. This reflects a common experience for people who take part in deliberative processes, who often report enjoying it more than they would have expected.
- **Personal impact:** Many felt the experience had made them want to get involved in R&D. Post-survey responses showed that participants were either 'very' or 'fairly' willing to take part in projects that involve the public in R&D. Some reported that their new understanding of the topic had motivated them to seek out opportunities.

18 Polling for CaSE in February 2023 (n=4,005) found that 44 per cent said they had heard of the acronym 'R&D' and knew what it meant, while 52 per cent said they either hadn't heard of it or had but didn't know what it meant. See: CaSE. 'Knowledge of R&D' (2023), available at: <https://www.sciencecampaign.org.uk/what-we-do/public-opinion/public-attitudes-to-r-d/knowledge-of-r-d/>

“I have discovered that [public involvement in R&D] is far wider than just testing medicines on people. I plan to find R&D that I can be involved in.”

- Male, 58, Durham

“Since learning more about R&D I understand how important it is to give your point of view on topics that you feel is important for others and yourself!”

- Female, 55, Dumfries and Galloway

3. The People's Principles build connection with R&D

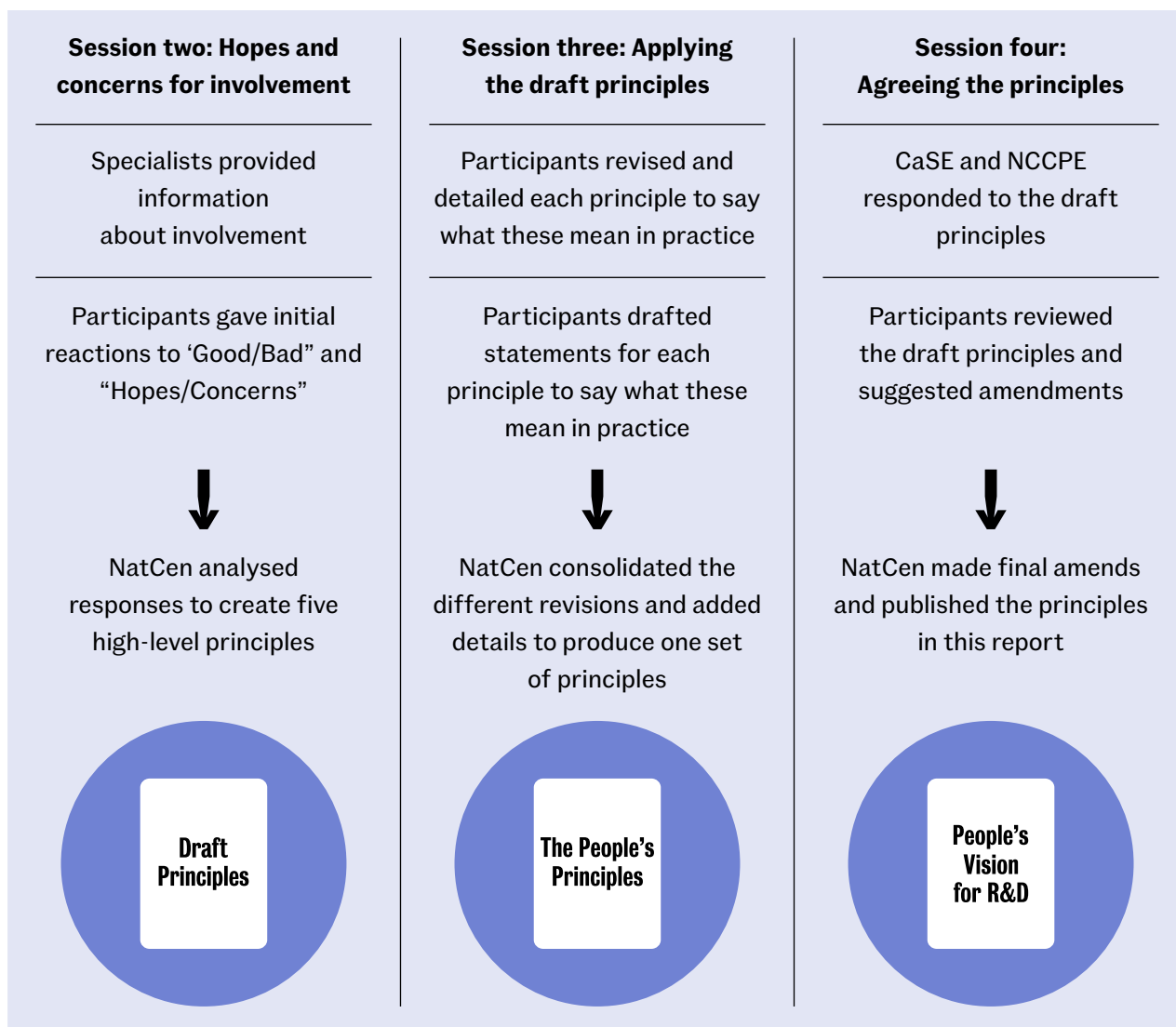
3.1 Key findings

This chapter outlines the People's Principles for Involvement in R&D that participants agreed, if applied, would build the public's connection with and trust in R&D. The principles highlight a range of things that participants feel contribute to this. They speak to the importance of raising awareness of opportunities to be involved by clearly communicating the purpose of involvement. They show that the public need assurances that their expertise will make a difference, and that involvement is not tokenistic. They also emphasise that the public need to know what any involvement entails in order to commit their time, and show what participants need to trust the process and feel respected, safe and secure.

3.2 Method and information provided

After the introductory first session, the People's Principles were developed through a three-stage process over sessions two to four of the dialogue (see Figure 6 below). This process started with participants' hopes and concerns for public involvement in R&D and ended with them reviewing final principles.

Figure 6. Process for developing the People’s Principles for Involvement in R&D.



In session two, participants identified their hopes for, and concerns about, involvement, as well as what they thought good and bad involvement was, after hearing evidence from three specialists:

- **Hannah Collins**, Associate Director, Engagement and Futures Programmes at the Natural Environment Research Council. Hannah outlined what funders think about when it comes to public involvement in research.
- **Natalie Wall**, Research Impact Lead for Social Sciences at King’s College London. Natalie spoke about supporting academics to involve the public in research.
- **Charles Bradshaw-Smith**, Co-CEO and Operations at SmartKlub, a company that works on creating renewable energy schemes and is a partner on a community energy project called the Trent Basin Energy Scheme. Charles spoke about businesses involving the public in research.¹⁹

¹⁹ For further details of the information presented by speakers, please see the separate appendix document.

NatCen analysed participants' identified hopes and concerns about involvement to create five high-level principles for public involvement in R&D. Specifically, that it should be: 'inclusive', 'worthwhile', 'transparent', 'ethical', and 'have a positive impact'.

In session three, participants reviewed these draft principles and reflected on what they could mean in practice. To support them in this process, participants were given details of existing projects that involve the public in decision-making about, or directly in, R&D. For example, they examined the 'Deep Place' project, in which researchers explored how social and economic change had affected the village of Sacriston prior to and following the closure of its colliery in 1985. This helped people think through for example, (among the other draft principles) what it means more generally for public involvement in R&D to have a positive impact on research participants and wider publics.

Two broad types of involvement were presented to participants; half involved the public in decision-making and half in taking part in R&D, at stages ranging from the design of research questions to engagement with results. Although this distinction was highlighted at the start of the session, participants did not engage with it and talked more broadly about 'involvement in research' across all the examples. Reflections from facilitators suggest that participants did understand the distinction, but it was not of significance for them when it came to discussing public involvement in R&D.

In total, 11 examples were explored across five breakout rooms. Through these examples, participants were introduced to some of the main underlying tensions in public involvement in R&D. For example, some projects required high time commitment for a small number of people (for example, by sitting on an NHS ethics committee for six months and making decisions). Others required lower time commitment for a larger number of people, (for example, completing surveys as part of a Cancer Research UK panel to inform its strategy).

At the end of the session each breakout room then wrote a sentence that detailed any revisions they wanted to make to each of the five draft principles in light of these discussions. In between sessions three and four NatCen consolidated what different groups had written into an updated set of People's Principles, for review and agreement in the final session.

3.3 Hopes and concerns

After hearing from specialists in session two, participants expressed hopes that public involvement could improve the quality of R&D because public expertise may add value to the end product. However, there were concerns that if the process is not run correctly then involvement may feel wasteful, tokenistic or lacking in impact. For example, the public might misunderstand their role or the purpose of the involvement, or researchers might not properly use the public's contributions.

Trust was a key theme across people's hopes and concerns. Participants expressed worries around the trustworthiness of organisations in general involved in R&D, and therefore held some concerns about motivations for involving the public – these related to whether the involvement was genuine rather than tokenistic. Many expressed hope that good public involvement would increase trust in R&D through providing some public oversight across the different stages of the R&D cycle.

The themes that emerged in participants' discussions of their hopes and concerns for public involvement in R&D formed the basis of the principles they developed across sessions two to four, which are detailed below.

“Hopefully [R&D] is for everyone’s benefit in the future.”

- Male, 79, Coventry

The principles below were agreed with participants in the final session. They reflect participants' expectations from involvement in order to build connection with and trust in R&D.

3.4 The People's Principles for Involvement in R&D

What is involvement for?

1. Public involvement in R&D should use the public's expertise to benefit the participants, the research and wider society.

- Researchers benefit when they really hear and listen to the public.
- The public gain knowledge and skills when they are meaningfully involved.
- The community benefits from the R&D at the end of the project.
- For this to happen, the right amount of time, money and energy needs to be invested in involving the public.

What do people need to know?

2. Public involvement in R&D should provide everything that participants need to feel properly informed.

- Honesty about the purpose of involvement and how the public's views will be used will help to build trust.
- Transparency about who funds the project, and why, will help to build trust.
- The public should hear the results, so they know the impact of their involvement.
- All information should be clear so that people feel informed rather than overwhelmed.

Who needs to be involved?

3. Public involvement in R&D should involve the right number of people with a range of experiences.

- A diverse group of people brings a range of experiences and perspectives to the research.
- Involving people with the right experience means researchers can learn from the public's expertise.
- The number of people involved needs to match the scope of the project, so the public have confidence in the results.
- Researchers should make opportunities for involvement accessible, well-known, and make sure no one is excluded.

How should involvement feel?

4. Public involvement in R&D should ensure that participants feel safe, heard, and invested in the research.

- Participants need to trust the integrity of the process.
- Participants need to feel confident that their views and data are handled responsibly.
- Participants need to feel safe to share their experiences and engage with new research.
- Participants should feel invested in the opportunity.

3.5 Reflections on the principles

From the discussions participants had when agreeing the principles, particular areas of importance in each emerged. (For clarity, participants engaged in these discussions prior to CaSE and NCCPE sharing their final reflections on the agreed principles.)

Principle 1: Public involvement in R&D should use the public's expertise to benefit the participants, the research and wider society.

Listening to the public was seen as valuable to R&D, because people bring perspectives (such as lived experience) that a researcher may not have.

Participants recognised that listening well requires resources and, to really benefit from the public's expertise, R&D projects need to allocate sufficient time, money, and energy. The post-dialogue survey showed this continued to be important for participants. For example, when asked what would be a barrier to getting involved, one participant highlighted 'the amount of time allocated or lack of information [provided] or poorly constructed workshops.'

Some participants noted that the public may not always need to be involved in R&D projects, and participants remained keen to avoid tokenistic involvement. They felt that if there is no clear purpose for public involvement, then there is a risk that involving the public would add no value and instead may be a waste of time and resources.

Principle 2: Public involvement in R&D should provide everything that participants need to feel properly informed.

Communicating the purpose and impact of involvement was important to participants. Through clearly explaining why the public are involved, and staying informed about what happens next, participants will feel passionate about involvement and willing to take part.

However, participants recognised that being meaningfully informed doesn't mean providing all possible information. Too much information could be overwhelming for participants and even leave them feeling less well informed. In addition, providing unnecessary information would waste the time of those leading the public's involvement. Providing all the information related to a project could also create biases that affect the outcome, for instance if a clinical trial was using a placebo.

Instead, participants felt information should be meaningfully transparent. This meant it should be clear, understandable, and importantly, relevant.

Principle 3: Public involvement in R&D should involve the right number of people with a range of experiences.

Involving a range of experiences and perspectives was important because participants thought different opinions lead to better R&D. They also thought this meant members of the public who are impacted differently by the R&D will be consulted. Participants understood experiences and perspectives to mean demographics – people of different ages, ethnicities, genders, and so on.

Participants discussed the tensions in involving different numbers of people. Some recognised that involving a lot of people might be ideal but may not be needed for every project. They understood that involving a large number of people is challenging and expensive, and felt that it was fair to select the most relevant people to involve. Some noted that involving a small but focussed group of people could be cost-effective.

Principle 4: Public involvement in R&D should ensure that participants feel safe, heard, and invested in the research.

Trusting the integrity of the process was important to participants. Trust was often discussed in relation to the responsible handling of personal data and people's opinions. They wanted assurances that data protection laws are adhered to and that researchers valued public input. This would make people feel safe but also engaged in the process.

In NatCen's first draft of principle 4, the term 'excited' was used: 'participants should feel excited about the opportunity.' In the final session participants rejected the word 'excitement' because some thought it was unrealistic for researchers to make every project exciting, and others thought that only involving those excited about the research would introduce bias. Overall, most thought that participants experiencing excitement was an unnecessary requirement and people being committed throughout a process was more important. Therefore, 'invested' was suggested.

4. Motivations and barriers to involvement

4.1 Key findings

This chapter details the motivations and barriers that participants identified in involving the public in R&D. Personal motivations included interest in the subject, an opportunity to learn, and trusting the legitimacy of the process. Opportunities to participate in R&D that benefitted wider society was a further motivation, which also featured clearly in the first and final principles. When it came to barriers, the first of two barriers identified was that people may simply not be aware of opportunities for involvement. The second was a concern that participation would be inaccessible due to factors ranging from digital exclusion, to financial barriers, time commitment required, and feeling intimidated by the world of R&D.

A good illustration of these motivations and barriers was found in one of the examples given in the dialogue – the Trent Basin Community Energy Scheme, run by the University of Nottingham in partnership with community energy company SmartKlub.²⁰ This saw residents' energy usage and domestic renewable energy generation monitored by researchers in a Nottingham housing development. Participants identified residents could be motivated by learning something interesting about energy consumption and generation through smart devices, and receiving help on how to reduce their energy bills. They also identified a motivation to benefit wider society through reducing the impact of climate change. Participants identified a possible barrier concerning accessibility for different kinds of residents, for example, around digital exclusion. However, they felt through offering different levels of involvement with clearly explained responsibilities the scheme could accommodate different people to take part.

²⁰ University of Nottingham (2022), 'Pioneering community energy scheme on the banks of the River Trent in Nottingham scoops national sustainability award', available at: [News - Pioneering community energy scheme on the banks of the River Trent in Nottingham scoops national sustainability award - University of Nottingham](#)

4.2 Method and information provided

Participants were directly asked in the final session and post-survey about what would motivate or be a barrier to them and others getting involved in R&D. In the session, we used a scenario in which participants were specifically asked to imagine telling someone they know about the public dialogue they were participating in. This was used as a starting point for imagining a broader discussion about what would motivate, or be a barrier to, people getting involved in R&D projects in general.

4.3 Personal and social motivations for involvement

Many participants were motivated by a topic that sounded interesting to them, or something they felt knowledgeable about and could therefore add value to.

“[What would motivate me would be] my own passion for research.”

- Male, 27, Camberley

“[What would motivate me would be] if I had knowledge of the topic and felt I could assist in the development.”

- Female, 67, East Riding

Learning new skills and gaining knowledge was a further motivation. As reported in chapter two, many participants said that learning was an unforeseen benefit of taking part in this dialogue process. This included learning about a topic but also gaining confidence through discussing their views with other people. Some participants referenced the Caerau and Ely Rediscovering (CAER) Heritage Project as an example of this.²¹ CAER sees local residents take part in a collaborative research process at a Welsh archaeological site, which participants saw as an opportunity to learn about local history.

People trusting that their views will be listened to and valued was another important motivation, as referenced in the People's Principles. Some related this to financial incentives, as a means of recognising the value of people's contributions.

“[I'd want] an incentive or reward for my participation and time.”

- Male, 42, Argyll & Bute

21 CAER Heritage, 'About', available at: [About us – caer heritage](#)

Having the opportunity to benefit wider society was another motivation. Participants used phrases such as ‘welfare of the public at large’ and benefitting the ‘common good’ to communicate how they saw R&D as benefitting society. Some participants referenced an example NatCen had given them in session three, of NHS Research Ethics Committees, which they felt had a clear benefit to the R&D sector and the public.

“[What would motivate me is] if the subject was of interest to me, and showed promise to a wider audience.”

- Female, 62, Worcester

4.4 Barriers of awareness and access

Lack of awareness about the opportunities for involvement in R&D was a key underlying barrier to participation. As described above in chapter two, at the start of the dialogue, participants were unaware of what involvement in R&D meant in practice. Across sessions two and three participants learnt that involvement in R&D can take many different forms – examples ranged from participating in community workshops to set research priorities, developing the skills to interrogate research proposals about AI, or monitoring air quality in London. In the final session, when people were asked about imagining discussing getting involved in R&D with someone they know, many commented that it was important to highlight the range of opportunities available. As articulated in principles two and four, it is also important to communicate what is expected of participants and how the involvement will feel.

“I am now a lot more aware of the wide scope and range of R&D projects taking place across the UK, which I had no idea about before. I now see through these case studies the extent R&D is beneficial to society and how involving the public can lead to better outcomes for parties involved.”

- Female, 28, Nottingham

Accessibility of involvement was discussed in terms of digital inclusion, accessible information and aligning involvement with people's lifestyles. These barriers were also raised in the R&D stakeholder workshops that ran prior to the dialogue and are well-known in public involvement and volunteering.²²

“‘Accessibility’ sums it up because there’s lots of different things that prevent [people participating], whether that’s being able to get on the internet or physical issues, or whatever it might be.”

- Male, 58, Durham

For participants, ‘digital inclusion’ covered access to devices, a stable internet connection, and confidence in using IT. Participants felt that support should be offered to overcome all of these barriers.

A related barrier participants discussed was that people may feel out of their depth, intimidated, and unable to contribute if the subject is unfamiliar to them. Referencing the dialogue itself as an example of how to address this concern, one participant highlighted in the post-survey that knowing a facilitator would be taking notes in the sessions put them at ease about contributing, as it made them feel they had someone they could refer to if they felt overwhelmed by the information. To overcome this barrier people highlighted that all information should be understandable to a lay audience and that people needed to be supported to engage with it during the research.

“[What would be a barrier for me is] if the research was too complicated.”

- Female, 60, Thatcham

A further set of barriers were people's free time and finances. Participants mentioned work and/or care commitments as reasons people may not be able to take part, along with financial barriers such as travel to in-person opportunities and the potential lost income if people were not remunerated and had to miss work to participate.

“What would be a barrier for me is] the time needed to be involved [...] I have a full-time job so [that] might limit certain things.”

- Female, 35, Welwyn Garden City

22 CaSE (2024), *People's Vision for R&D: Stakeholder Workshops Report*, available at: <https://www.sciencecampaign.org.uk/analysis-and-publications/detail/peoples-vision-for-rd-stakeholder-workshops-report/>

5. People value involvement because it improves R&D

5.1 Key findings

This chapter explores what participants valued about public involvement and what they thought would support the case for putting the People's Principles into practice. It highlights participants' belief that involvement that aligns with the People's Principles will improve R&D outcomes through using public expertise to understand how research impacts people. Participants also believed that increased opportunities for involvement would add value to the research system through improving researcher skills and raising the standards of public involvement.

5.2 Method and information

In the final session facilitators asked participants to discuss what arguments they would make to convince the R&D sector to adopt the People's Principles. To give participants context about what would happen next, CaSE also outlined its plans to share the People's Principles with the R&D sector, and its plans to develop specific recommendations for the sector informed by the principles. These recommendations include how the sector can increase opportunities in, and improve the standard of, public involvement in R&D.

To develop their arguments to the R&D sector, participants were drawing on information they had heard across the dialogue from CaSE, NCCPE, and other speakers which covered what the sector perceived the value and tensions of involvement to be. To add to this, in the final session, both CaSE and NCCPE also offered their reflections on the People's Principles, explaining to participants where they felt there was further for the sector to go to ensure widespread and consistent adoption. They noted, for example, that a lack of time or money and cultural barriers may prevent some organisations adopting the principles. They also highlighted where some of the principles reflected best practice among those who already are involving the public in R&D.

After hearing these reflections, facilitators then supported participants in breakout rooms to develop the arguments they would make to convince the R&D sector to adopt the People's Principles. This chapter presents the key themes from the arguments put forward by participants in the final session.

5.3 Public expertise adds value to R&D

Participants highlighted that the lived experiences and non-specialist views provided through public involvement adds value to R&D. They understood lived experience to be important because it stops researchers making assumptions about how research will impact people in society. They also understood non-specialist views as important because they offer a fresh perspective on a research topic.

“The public have knowledge that might be crucial or at least useful to research [...] Knowledge is power so the more the public are involved the more power is potentially balanced out.”

- Female, 64, Bristol

Participants thought that the public could be involved at an early stage to refine the design of any project, and to inform the research direction. If done effectively, this would save money by identifying issues with the research early in the process instead of at the end. One participant highlighted that not involving the public could mean that researchers make mistakes or get it wrong, which can lead to wasted money in the longer term.

5.4 Researchers learn from the public

Participants felt that if researchers see the public as an asset to their research, rather than viewing involvement as a tick box exercise, then researchers would gain additional skills and knowledge such as learning how to communicate their research to the public.

“The opinions [of the public] can be very beneficial in both collecting additional data but also for helping the public further understand an issue.”

- Female, 27, London

5.5 More public involvement means better involvement

Participants thought more involvement would highlight the benefits of investing in public involvement in R&D, and therefore lead to better quality involvement in turn. For example, through research and opportunities for involvement becoming more accessible, or through the R&D sector gaining a better understanding of how to raise awareness of R&D opportunities amongst the public.

6. Conclusion and recommendations

The findings in this report have highlighted that when the public learn more about the range of ways people can be involved in R&D, they develop a more positive connection with it. In its use to develop the People's Principles for Involvement in R&D, this dialogue has also highlighted the importance of increasing awareness of involvement in R&D through communicating the benefits for participants, researchers, and wider society. It also highlighted that any involvement needs to use the public's expertise to make a difference to society and avoid tokenistic engagement.

CaSE asked NatCen to provide recommendations for further qualitative research that could continue to improve understanding about public involvement in R&D. Through discussion with CaSE and NCCPE, we suggest the following areas:

- **Understanding barriers and motivators for underrepresented groups:** The barriers and motivations for involvement identified in this research reflect broad themes that are seen across wider public involvement initiatives. To take this finding further we recommend conducting in-depth qualitative research with underrepresented groups to understand the particular motivators and barriers that impact different members of society.
- **Understanding how the public approach tensions and trade-offs:** In recognition of the low awareness amongst the public of the range of ways people can be involved in R&D, this dialogue focussed on sharing examples of existing projects which helped participants apply their principles. This allowed us to understand, at base, the principles which participants wanted to guide public involvement in R&D. To build on these principles, we recommend reconvening these participants to deliberate the tensions and trade-offs inherent in designing public involvement in R&D. This would allow the R&D sector to have a more detailed understanding of public priorities when it comes to involvement. For example, when it comes to how much funding research councils should allocate to R&D that involves the public compared to that which does not. Reconvening the participants from this project, rather than recruiting new ones, would ensure the deliberation could spend more time on consideration of trade-offs as participants will already be familiar with R&D involvement itself.

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- **Taking the People's Principles to a wider public:** Deliberative processes such as this research bring together a sample which, by its nature, reflects but cannot be fully representative of the wider public. Therefore, to understand what the wider public think about the conclusions of the participants who took part in this process NatCen recommends hosting the People's Principles on an open-access qualitative consultation platform. This would explain how the principles were developed and invite members of the public to comment on areas of agreement and disagreement. This would provide insights into how the general public understand and engage with these principles, which would help CaSE refine them further and communicate about them more broadly.

