

THINK

AGAIN

**The Code check-in
report
2022-23**

**TOMORROW'S
ENGINEERS**

CODE

Summary

When asked how likely it is that they would **recommend joining The Tomorrow's Engineers Code to a friend or colleague**, Signatories on average gave a **score of 8** (on a scale of 0-10).

Across 9 areas that The Code aims to support with, on average, **Signatories reported improvements on 5 of the different aspects including:**

- **70%** agree or strongly agree that being a member of The Code improved the way their organisation **understands how its activities relate to other STEM outreach activities.**
- **59%** agree or strongly agree that The Code has improved how they **collaborate with other organisations involved in STEM outreach.**

Last year it was highlighted there were areas of challenge in understanding **what's happening across the sector, targeting young people or schools that don't typically participate in engineering-inspiration initiatives** and **evaluating** these activities. The proportion of members agreeing or strongly agreeing that being a member of The Code has helped them with these statements has increased since last year.

What is the Code check-in?

The Code check-in is an annual survey capturing insights into how successfully we, the Code community of Signatories, are working towards meeting the four Code Pledges and what support is needed to improve our collective efforts to inspire a diverse engineering workforce.

The aim of the Check in is to understand:

- What are Signatories' views of The Code? What do they perceive as the impact of being a member?
- What have Signatories done to embed the four Code pledges in the last year?
- What are Signatories' plans for the coming 12 months?
- What additional support do Signatories feel they need in meeting the pledges?

The Code launched in October 2020 with the first Code check-in between November 2021 and January 2022 and this second Code check-in took place between March and April 2023.

Who participated in the 2023 check-in?

Respondent profile		N (%) of respondents
Organisation type	Company	66 (43.4%)
	STEM outreach	47 (30.9%)
	Professional Engineering Institution	22 (14.5%)
	Higher Education Institution	8 (5.3%)
	Further Education Institution	1 (0.7%)
	Statutory ²	2 (1.3%)
	Trust / Foundation	6 (3.9%)
Company size	SME	11 (16.7%)
	Large	55 (83.3%)
Length of time as Signatory	Up to 6 months	23 (15.1%)
	6 To 12 months	30 (19.7%)
	12 to 24 months	42 (27.6%)
	Over 24 months	57 (37.5%)
Total Responses		152

The check-in findings here are based on:

- 152 responses out of 235 Signatories¹ (65% response rate) - note that Supporters are not included.
- Data collected between March and April 2023.
- Signatories were invited to take part by the Code team. They were further encouraged with reminders sent by account managers during the fieldwork.

¹ Number of Signatories as of March 2023

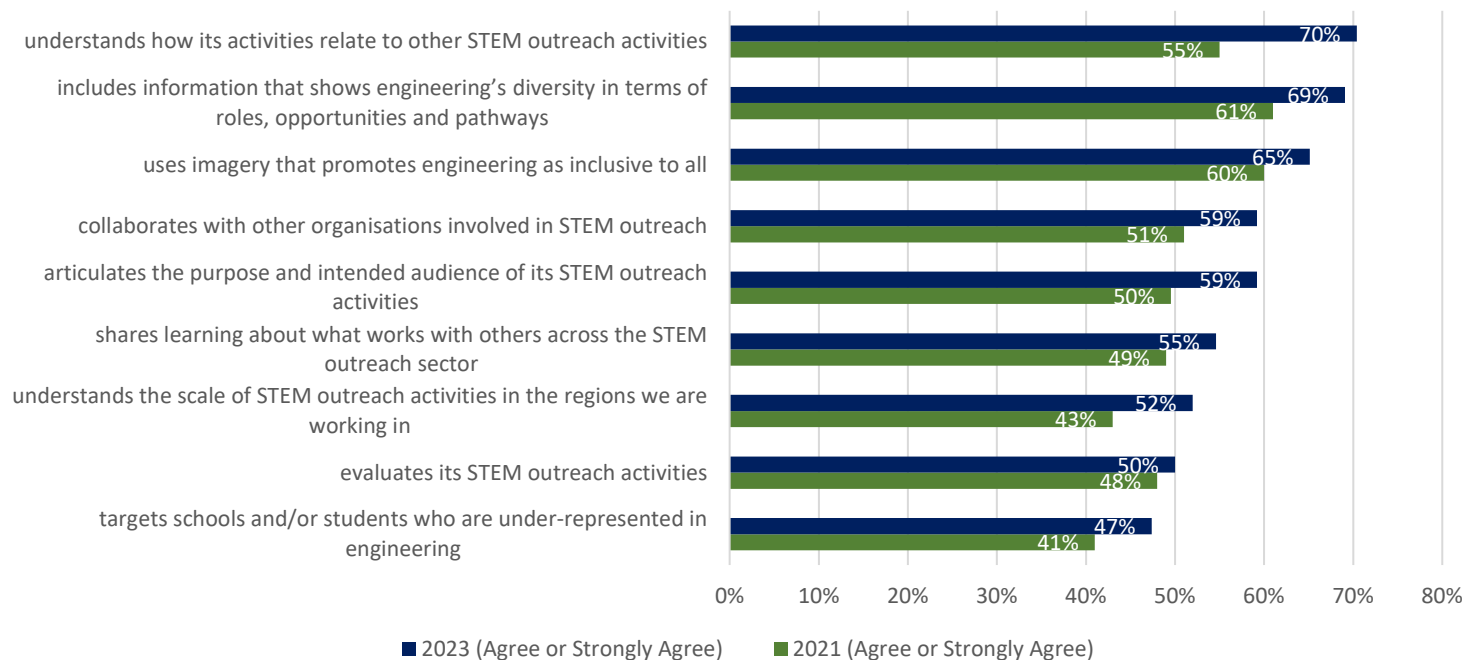
² Refers to government departments

Impact of being a Code member

Respondents are broadly positive about the impact of being a Code member. Though more can be done to support Signatories in understanding current regional provision and targeting schools and/or students in their STEM outreach, the proportion of members agreeing with these statements has increased since the 2022 check in.

- **70%** of respondents agree or strongly agree that being a member improved the way they understand how **their activities relate to other STEM outreach**, up from 55% in 2021.
- **69%** agree or strongly agree that being a member of The Code improved the way their organisation includes information that **shows engineering's diversity in terms of roles, opportunities and pathways**, this has increased from 61%.

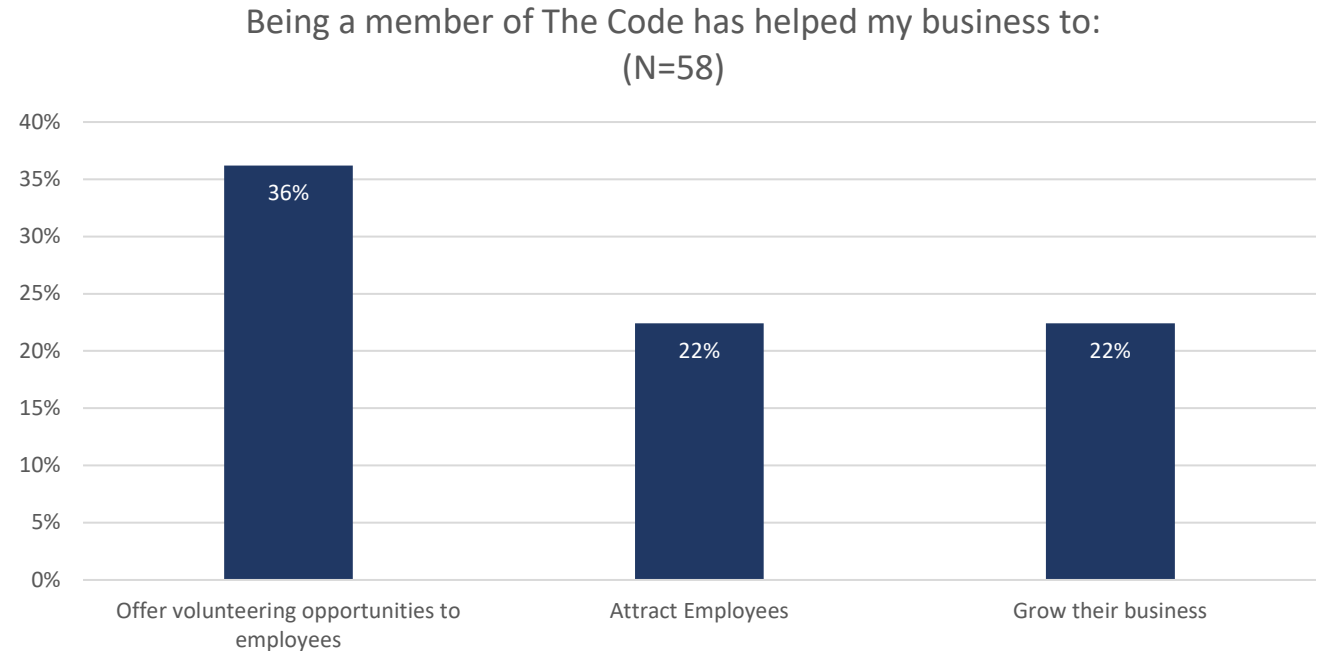
Being a member of The Code has improved the way my organisation...
(n=152)



Impact of being a Code member on engineering employers

Engineering employers were asked whether they agreed or disagreed that being a member of The Code had helped their business in a variety of ways.

- 36% of engineering employers agreed or strongly agreed with the statement that being a member of The Code had helped their business to **offer volunteering opportunities to employees**.
- 22% of engineering employers agreed or strongly agreed with the statement that being a member of The Code helped them to **attract new and diverse talent** and **grow their business**.



Net Promoter Score

- The Net Promoter Score (NPS) is a method widely used to evaluate whether users would recommend a product or service. It is calculated based on responses, in this case, to the question:
 - ‘How likely is it that you would recommend joining The Code to a friend or colleague?’ (0 = extremely unlikely; 10 = extremely likely)
- The total NPS score is calculated by subtracting the percentage of detractors from the percentage of promoters (**% Promoters** - **% Detractors** = Net Promoter Score (+-100))
 - **Detractors** are those who gave a response **between 0 and 6**
 - **Promoters** are those who gave a response of **9-10**
 - **Passives** are those who gave a response of **7-8**
- An NPS score can range from -100 to 100. A score above 0 is considered 'good'. A score above 50 is considered 'excellent'.

Net Promoter Score

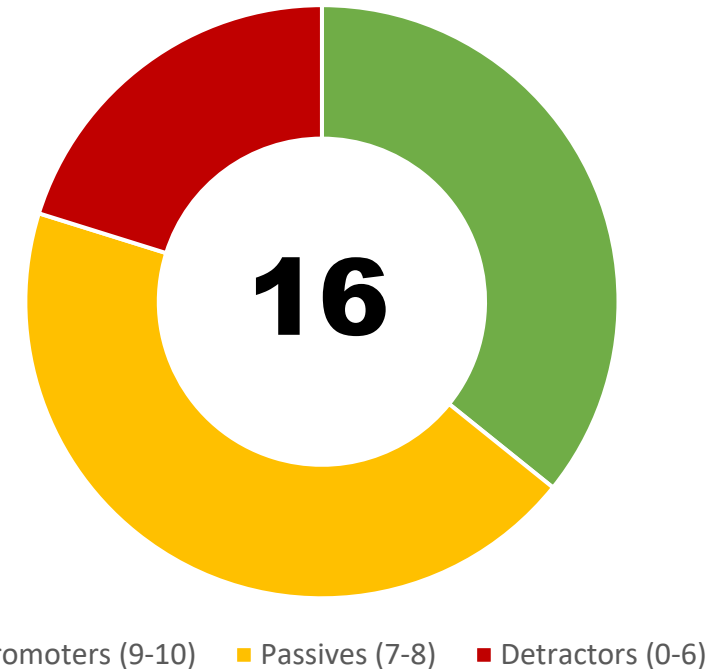
The Net Promoter Score for The Code is 16. This is the same NPS received in the 2021 check-in.

- Promoters (response 9 to 10) = 36%
- Passives (response 7 to 8) = 44%
- Detractors (response 0 to 6) = 20%

Just over one third of Signatories are Code promoters and would recommend joining to their friends or colleagues.

The mean response out of 10 was 8.

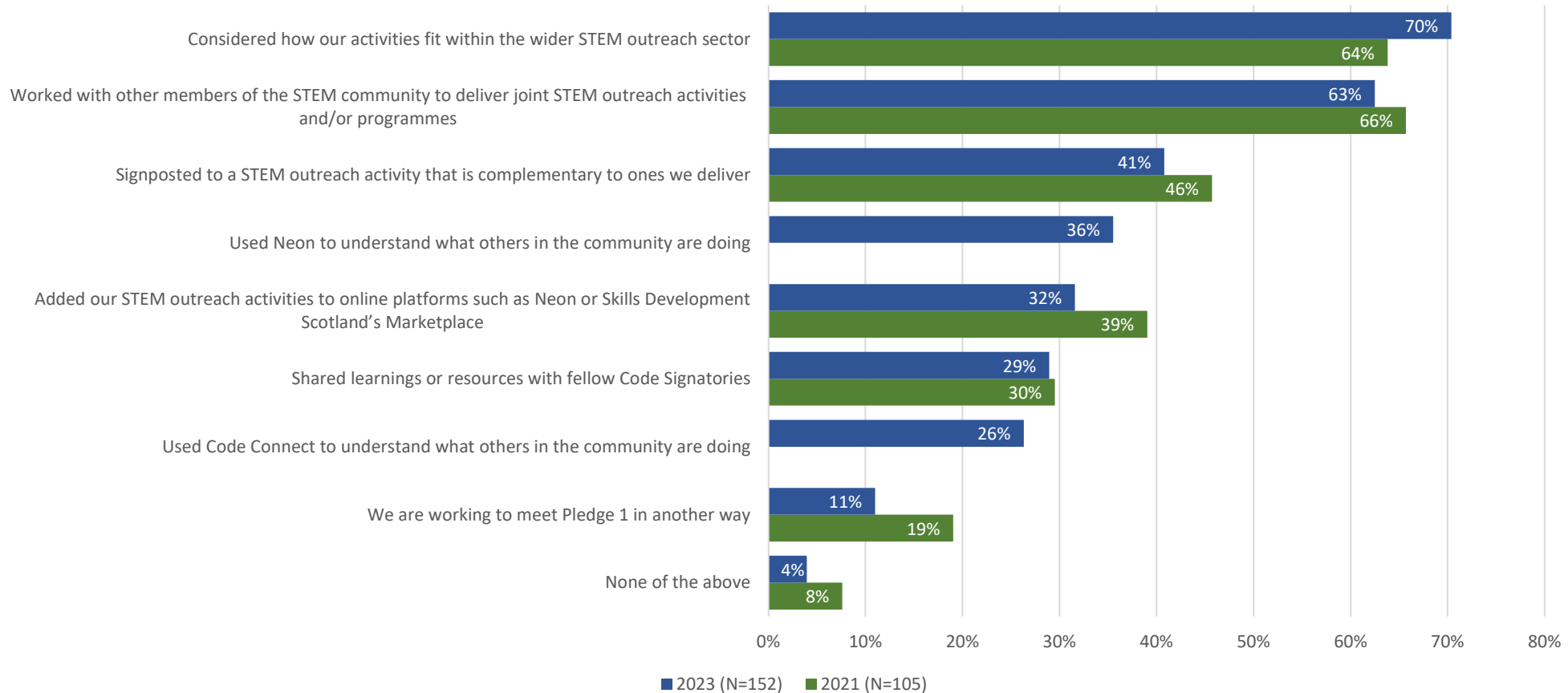
There were no significant differences in responses by length of time as Signatories, organisation size, or whether respondents were from companies or STEM outreach organisations.



Pledge 1: Inspiring connection

Signatories are working to ensure their programmes contribute to a sustained and rich STEM journey for all young people in a variety of ways

In the last 12 months, has your organisation done any of the following towards meeting Pledge 1?



Some statements were changed since last year, where consistent with the last check-in the data is included

Pledge 1: The next 12 months

What would Signatories like to achieve over the coming year toward ensuring their 'programmes contribute to a sustained and rich STEM journey for all young people' (Pledge 1)?

Common themes include:

- Increase the quantity of programmes offered
- Strengthen and increase school partnerships
- Increase their reach
- Collaborate more with other organisations providing engineering outreach
- Collaborate more with the wider engineering community
- Embed learning from being a member of the Code into their practice.

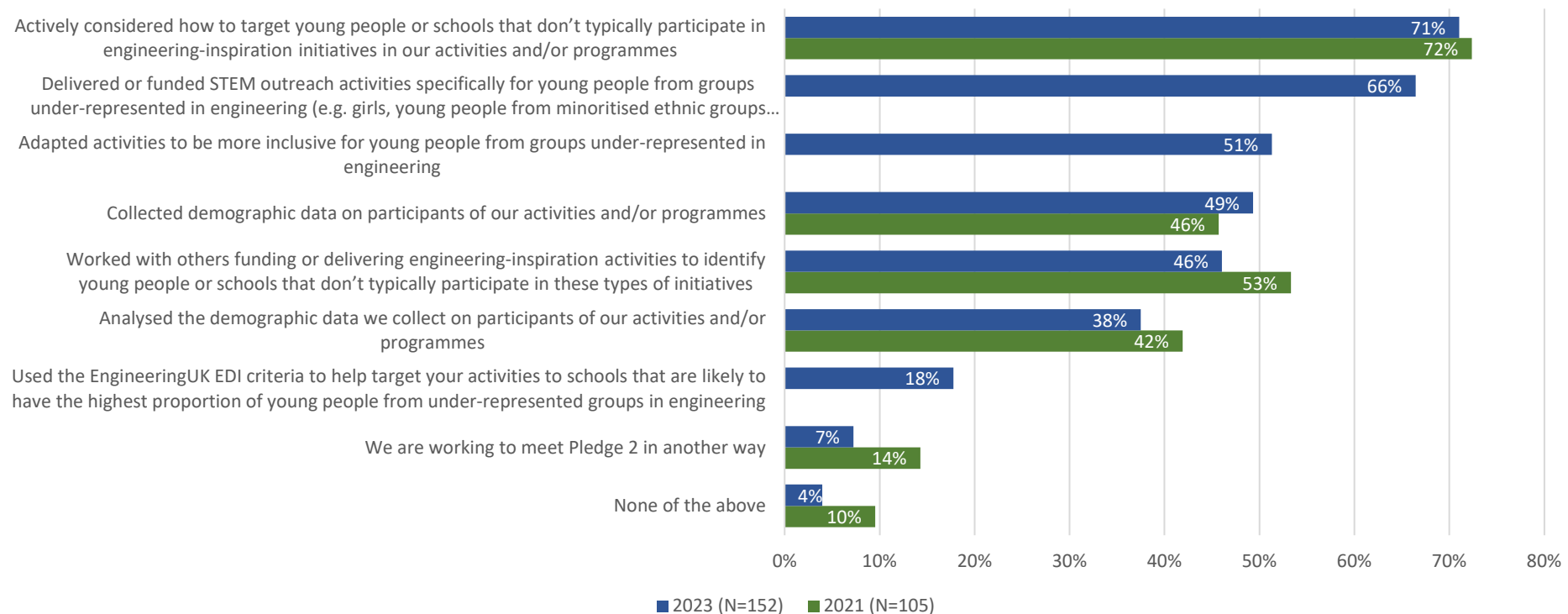
"Further developing our holistic wrap-around STEM support system and partnership approach with others in the STEM field and beyond. Making more organisations and institutions across the UK and internationally, aware of The Code, and working towards getting them to become Code signatories and support us all in the 4 pledges."

"We are working to extend our offering to be inclusive and accessible to young people across the region, with access to multiple industries as a result. We will aim to use Code Connect more often to encourage collaboration with other likeminded organisations to achieve this goal."

Pledge 2: Driving inclusion

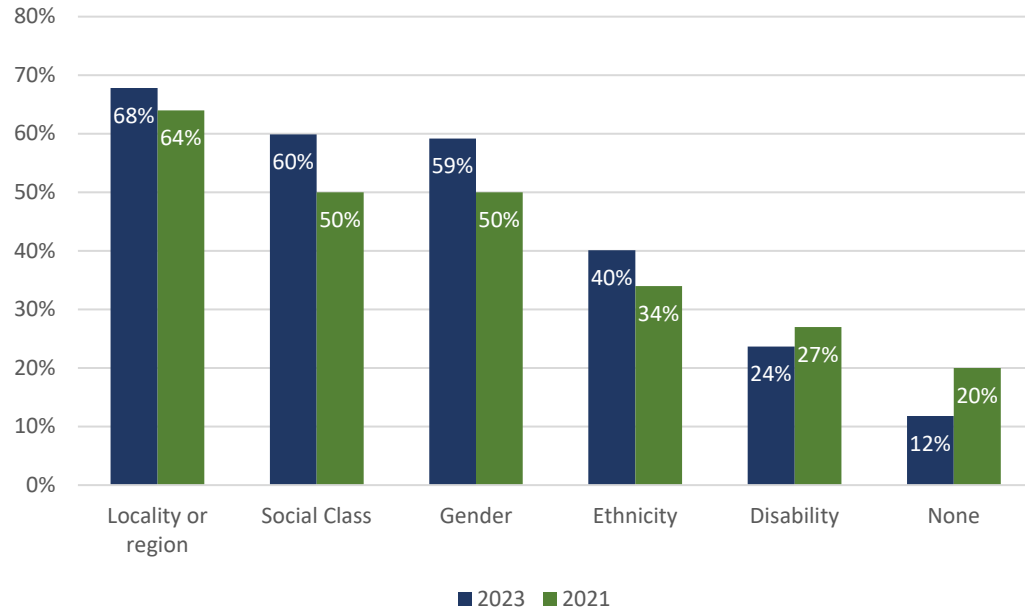
Signatories are working in a variety of ways to ensure all young people have opportunities to engage in engineering-inspiration activities, so that no one is left behind.

In the last 12 months, has your organisation done any of the following towards meeting Pledge 2?



Some statements were changed since last year, where consistent with the last check-in the data is included

Pledge 2: Driving inclusion



Q. In the last 12 months, has your organisation actively targeted young people or schools based on any of the following characteristics? (n=152)

Over 80% of Signatories reported targeting young people or schools based on various characteristics.

- 68% of Signatories target their STEM outreach based on locality or region.
- Respondents also reported targeting young people or schools by gender (59%) and by social class, such as by looking at free school meal eligibility and/or low areas of household income or parental education (60%).
- Fewer reported targeting young people or schools by ethnicity (40%), although this has increased since the last check in.
- The proportion of respondents who indicated they targeted young people or schools by disability is 24%, although many have indicated it is their aim to increase targeting in this area over the next 12 months.

Pledge 2: The next 12 months

What would Signatories like to achieve over the coming year toward 'ensuring all young people have opportunities to engage in engineering-inspiration activities so that nobody is left behind' (Pledge 2)?

"Get more consistent in how we communicate our offer to schools. Particularly to schools in areas our demographic insights highlight as having low engagement."

"Work closely with local authorities and schools to support young people at risk of NEET. Promote an inclusive workforce and opportunities for all"

*"Increase our activities with **neuro diverse schools**, use the **EDI data from Engineering UK** so as we grow our activities. we are targeting them at underrepresented areas."*

*"**Analyse the demographic data** we collect on participants of our activities and/or programmes"*

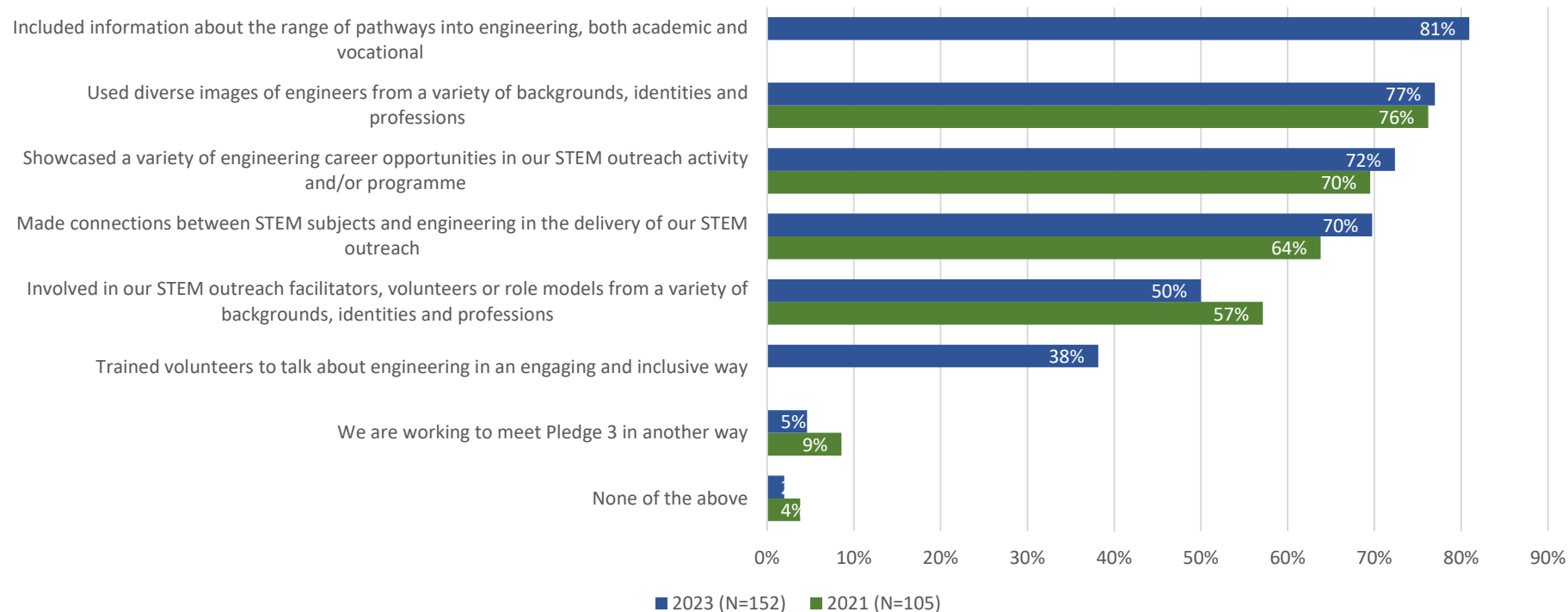
Common themes include:

- Ensure that targeting of young people from diverse backgrounds is embedded
- Engage more with underrepresented groups
- Make better use of Code resources, including EDI criteria and EDI data from EngineeringUK to improve targeting
- Improve their own data to better understand current offering
- Focus more on improving the opportunities for young people with SEND.

Pledge 3: Showcasing engineering

Signatories are working in a variety of ways to promote a positive, compelling, and authentic view of engineering and showcasing the breadth of opportunities.

In the last 12 months, has your organisation done any of the following towards meeting Pledge 3?



Some statements were changed since last year, where consistent with the last check-in the data is included

Pledge 3: The next 12 months

What would Signatories like to achieve over the coming year toward ‘promoting a positive, compelling, and authentic view of engineering and showcasing the breadth of opportunities’ (Pledge 3)?

Common themes include:

- Participate in more outreach events, like careers fairs
- Support young people with career readiness (mock interviews, CV building etc.)
- Create more resources which appeals to young people (videos etc.)
- Continue to support employee volunteering opportunities
- Ensure they are using diverse range of engineers when talking to young people.

*‘I believe we simply need to get **video snippets** out there to showcase not just what the blue-chips are doing, but what ... the "supply chain" and the pioneering work that SMEs are driving each and every day”*

*‘Ensure we use as **diverse a range of engineers** as possible when visiting local schools (**female, BAME community etc**)’*

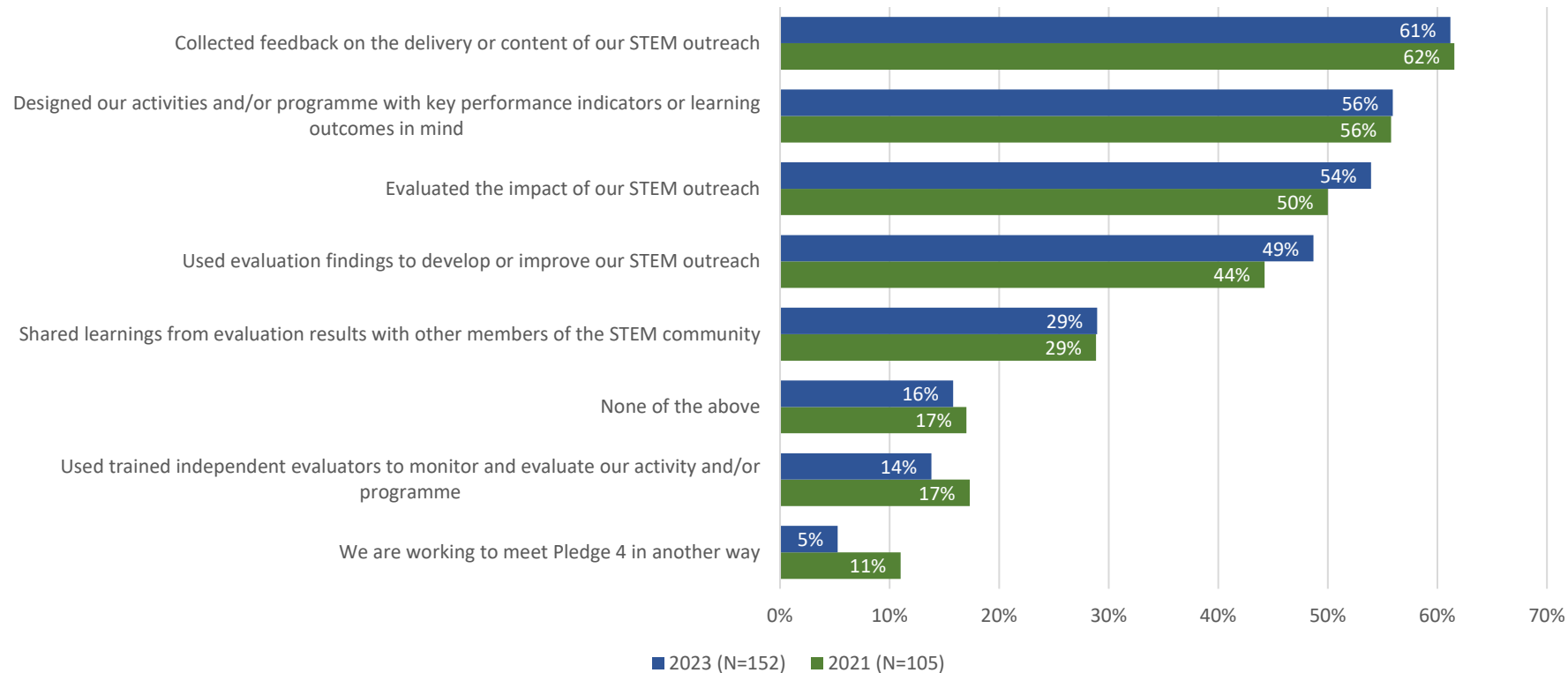
‘Further develop the capability of our youngest engineers to act as advocates for the sector’

‘Continue to support our employees to volunteer by offering them more opportunities and putting in more training with new starters”

Pledge 4: Improving impact

Signatories are working in different ways to improve monitoring and evaluation of programmes and activities to develop a shared understanding of what works.

In the last 12 months, has your organisation done any of the following towards meeting Pledge 4?



Some statements were changed since last year, where consistent with the last check-in the data is included

Pledge 4: The next 12 months

What would Signatories like to achieve over the coming year toward ‘improving monitoring and evaluation of programmes and activities to develop a shared understanding of what works’ (Pledge 4)?

“Evaluate our impact in greater depth and use this to inform future outreach”

“Go beyond the evaluation numbers to dig deeper into what is effective in supporting teachers, and young people explore STEM”

“We are working to improve the impact evaluation of our activities so that we can show impact rather than usage statistics for our outreach programmes.”

*“We would really like to be **better linked up with evaluators in STEM education**. We have just developed a new Theory of Change and want to ensure that data we gather is consistent/can be benchmarked with data gathered in other organisations. It would be good to part of a community re. this work, sharing good practice and interesting data..”*

Common themes include:

- Improve and innovate evaluation
- Use evidence of impact to influence future developments
- Share learnings and case studies to support the community
- Work with the code community and EngineeringUK to support the development of evaluation.

Code Connect

Respondents were asked about Code Connect that Code members can use to share, connect and collaborate within the community (launched in October 2022).

- Encouragingly 75% of the respondents were aware of Code Connect, however only 39% of those said they had used Code Connect.
- Despite the low usage of Code Connect, it appears that those who are aware are also aware of some features, with 57% being aware of the request to connect feature and 38% being aware of the filter.
- Of the 25% who were not aware of Code Connect before the check in, 58% indicated they will use it.

Responses from members to other questions indicated a desire to collaborate with other Code members. Code Connect could initiate and help to facilitate collaboration between members. Therefore, ensuring greater awareness of Code Connect could improve collaboration among signatories.

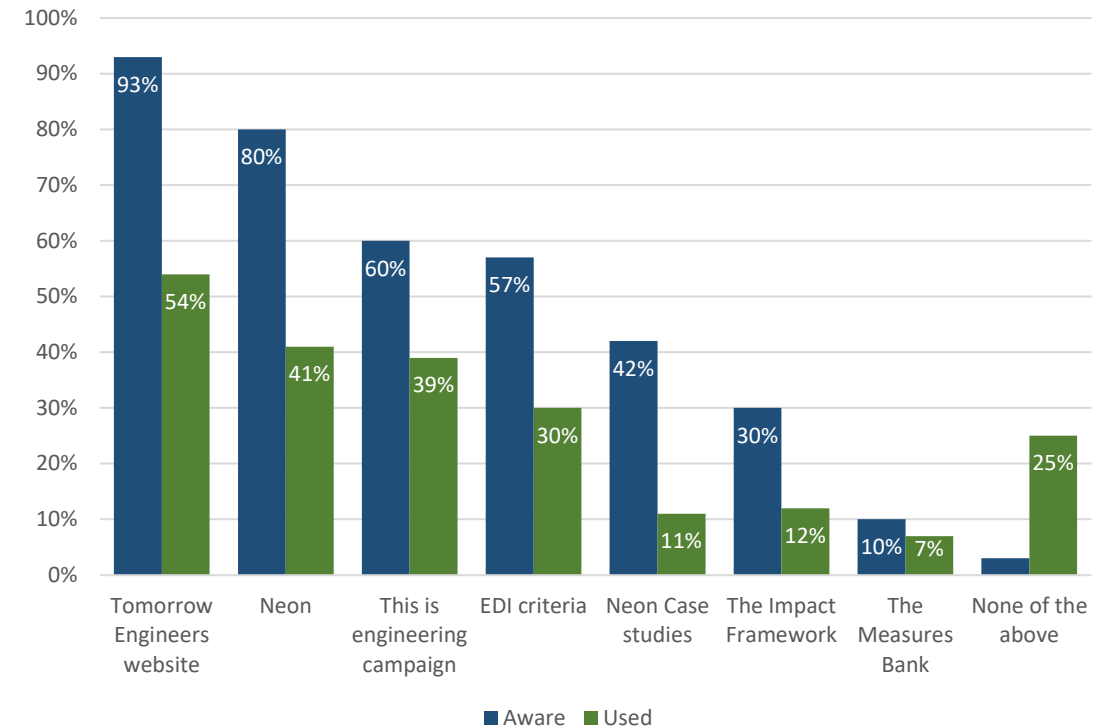
Awareness and use of resources

Nearly all participants (93%) had heard about the 'Tomorrow's Engineers' website that hosts resources and guidance before the Check-in. 54% reported they used the resources available on the website in the activities and/or programmes they fund, design or deliver.

The findings presented in the chart to the right highlight areas where more could be done to support and encourage Signatories to use specific resources, where relevant. For example:

- While 80% of Signatories had heard about Neon, only 41% reported using the platform
- 10% had heard about the Measures Bank this has dropped from 18% last year, and only 7% reported using this resource
- Over one quarter reported using none of the resources listed.

Follow up research could be undertaken with Signatories to explore any other resources they may be using, or potential barriers and challenges they may be facing in accessing or using these resources in their STEM outreach.



Q. 'Which of the following resources had you heard of before today?' (Awareness; n=152) and 'Which of the following resources has your organisation used in the development, delivery or evaluation of any STEM outreach activities and/or programmes you fund, design or deliver?' (Use; n=152). (Note that use of EDI criteria is higher than the earlier data because this is whether it has ever been used as compared with use in the last 12 months.)

What further support do Signatories need?

Collaboration	Information	Tools & resources	Examples	Internal challenges
<p><i>'Understand what other organisations are doing to meet the four pledges. Learn best practice and identify any collaboration opportunities. As we review and further develop our education programme and STEM outreach activities to engage with The Code to see'</i></p> <p><i>'Opportunities to connect to individuals who would like to participate in case studies or organisations who want to be featured in our resources. Routes to find partner organisations with similar aims and outputs.'</i></p>	<p><i>'Better understanding on best practice when using your resources (Pledge 4) - i.e., seeing how a similar organization has benefited from its use in a structured manner'</i></p> <p><i>'The links provided on the previous page are a useful resource and will engage with them moving forwards. Any support around improving impact would be beneficial.'</i></p>	<p><i>'Pledge 4 is the area we need to improve the most so any additional support/resources with this would be great.'</i></p>	<p><i>'Examples of what others are doing, how do they improve engagement through what they have learnt'</i></p>	<p><i>'we feel Tomorrow's Engineers code and EngineeringUK have been very supportive, however we are a small organisation ... have not had a lot of capacity to fully engage with The Code.'</i></p>

Support over the next 12 months

Overall, signatories want The Code to prioritise creating opportunities for community members to learn about each other's work.

When asked for topics that code members would like to see covered in support the following came up:

- Greater support on engaging with underrepresented groups (Gender, ethnicity, SEND and social background)
- Support around evaluation and impact
- How to access more funding and resources to support engagement
- Greater collaboration and sharing of evidence between Code Signatories.

When asked about the best method for providing support, **70%** indicated **Online Workshops or Webinars**.

Just under half indicated **regular email updates (43%)** and **Tomorrow's Engineers resources (45%)**.

Just over a third of respondents would like to receive this support in the form of **Peer learning groups (37%)** and **In-person events (36%)**.

Summary and next steps

Pledge 1 (Inspiring connection) Finding

- Signatories are considering how their activities fit within the wider STEM outreach sector, but more could be signposting to complementary activities.
- Signatories are keen to collaborate more and start using Code Connect.

Next steps for The Code

- We will continue to work with the community to ensure that more Signatories are on Code Connect and able to easily see what others are doing.
- We will work with successful Code Connectors to share their collaboration stories with the rest of the community and help others to understand how they too can harness the power of the platform.
- We will develop a strategy to align The Code and Neon, supporting Signatories in cross promotion of their activities to schools.

Pledge 2 (Driving inclusion) Finding

- More Signatories have collected demographic data on participants in their activities and/or programmes than last year. However, fewer have actually analysed the data. More Signatories are targeting their activities towards each demographic (exc. disability).
- Signatories are keen to start using more EngineeringUK resources to help them with targeting (e.g., EDI criteria).

Next steps for The Code

- We will help Signatories understand how they can analyse and use demographic data.
- We will deliver more webinars and guidance for the community to help them to understand what the EDI criteria are and how they can use it.

Summary and next steps

Pledge 3 (Showcasing engineering) Finding	Next steps for The Code
<ul style="list-style-type: none">• Signatories are including information about the range of pathways into engineering, both academic and technical.• Signatories want to produce more inspirational video content and support their employees as STEM outreach volunteers.	<ul style="list-style-type: none">• We will work with Signatories who have experience in developing inspirational careers content to share their successes and advice with the community.• We will work with STEM Learning to encourage Signatories and their employees to become STEM Ambassadors and signpost them to relevant resources, training and materials for them to use.
Pledge 4 (Improving impact) Finding	Next steps for The Code
<ul style="list-style-type: none">• Signatories want to share learnings and case studies with others.• Signatories are keen to evaluate their findings in greater depth.	<ul style="list-style-type: none">• We will work Signatories who want to share case studies with the community to do so.• We will explore ways for Signatories to share evaluation findings within the community, if they do not wish to do so more publicly.
Resources and Support	Next steps for The Code
<ul style="list-style-type: none">• Signatories want to know more about what others in the community are doing.• Signatories want to find partner organisations with similar aims and outputs• Signatories want to start using more of our resources.	<ul style="list-style-type: none">• We will continue to motivate Signatories to use Code Connect and ensure they understand its benefits. We will also work with Code Connectors to understand ways in which the platform could be improved.• We will ensure that Signatories are aware of all the resources available, signposting to them regularly and providing webinars around them to help understand how to use them.

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