

Northern Gas Networks Young Innovators Council



Session 3: Net zero education June 2023

Facilitated and written by Solutions for the Planet

Contents:

1. Overview of the session
2. Attendees
(YIC, S4TP, Northern Gas Networks and other)
3. Key discussion points
4. Key recommendations (priorities)
5. Conclusion
6. Appendices

1. Overview of session

2023 marks the third consecutive year of Northern Gas Networks' Young Innovators Council (YIC) led and facilitated by Solutions for the Planet (S4TP)¹. The YIC continues to be the voice of young people (aged 14-19) at Northern Gas Networks (NGN). It provides young people's perspectives and Northern Gas Networks ensures these young people's thoughts and opinions are put at the heart of the business' decision making.

Each session agenda is co-created by S4TP and NGN, influenced by the YIC's input on what topics are most important to them. The aim is for meaningful and relevant engagement which provides a real opportunity for the YIC members to influence decision-making at Northern Gas Networks. This year, the YIC is made up of 32 young people aged 14–19 who are based across the footprint of Northern Gas Networks. Four other young people were members of the YIC this year, but have had to leave due to other commitments (mostly relating to school.)

This report provides a summary of the third session of the Young Innovators Council for NGN which took place on 28th June, with recommendations generated from the discussion and feedback the young people provided. This session focused on education in schools on net-zero and the future of energy, and what NGN could be doing to support this.

Background to session

The first session of Northern Gas Networks' Young Innovators Council in February 2021² explored the impact NGN could have to support young people through education and work. The YIC at the time helped to co-design NGN's Education and Skills Strategy, offering insights into NGN school visits, work experience, and careers and apprenticeships at NGN.

The YIC's key recommendations from this session included a clear direction to do more meaningful and interactive outreach in schools, and to teach young people about the energy sector in compelling and engaging ways. Specifically, the YIC suggested that Northern Gas Networks do more to educate around net zero and the future of gas and innovation in this area, especially NGN's role within this.

NGN has now appointed a dedicated net zero educator who is designing an education programme around net zero, aimed at young people from Key Stage 1 (primary) to Key Stage 4 (school and college leavers), as well as work with university students. This third session of 2023 offered the opportunity for the current YIC to interact with this key role within NGN and discuss how best to utilise this new strategy.

¹ Solutions for the Planets' Youth Insights Programme: <https://www.solutionsfortheplanet.co.uk>

² [Northern Gas Networks YIC 2021 Session 1 Report](#)

YIC 2023 Session 3: Net zero education

Wednesday 28th June, 5.15pm

Objectives of the session for NGN



- To understand what the YIC expect to see from an education session about net zero.
- To identify the benefits of this programme being delivered by someone from industry.
- To begin to understand how the National Energy Research Village (NERV) and Hydrogen Home can be used effectively as part of this programme.

Methodology

Prior to the session, the YIC were asked to think of the best educational workshop they've had in school that was delivered by a visiting facilitator. It might have been someone from a specific industry, covering a particular area of careers, or something completely unrelated to school work.

- What was different about someone external delivering the session instead of their teachers?
 - What was particularly good about that facilitator and the session they did?
 - What is the main thing they think they get out of educational workshops delivered by people from a specific industry?
- As has been the case throughout the YIC, Zoom main room, breakout rooms, chat functions and whiteboards were used to host an introduction to the topic and the expert witness, and to explore the session objectives in further detail.
 - Following the success of longer breakout rooms during the last YIC session in April, a scenario-based discussion was again put to the YIC in this session:

Breakout rooms



Your school has entered a competition, and the race is on to become the first school in your area to reach net-zero.

A hydrogen educator is coming to visit your school before the race begins to help you better understand what net-zero means and equip you with ways to engage your friends, family and the wider community about it.

- What are the most important questions you want the facilitator to answer?
- What kinds of activities might be useful for this workshop?
- How should the facilitator deliver that workshop to you effectively?
- What knowledge and skills would you want to gain to help you engage others around you about net zero?

Solutions for the Planet Limited, Company No. 4375187. www.solutionsfortheplanet.com Copyright © 2022 All rights reserved.

Figure 1: Screenshot of breakout rooms starting questions; YIC 2023 Session 3

*I think that [net zero and the future of energy] should be taught from a young age.
All the way through school.
Everyone needs to think with this mentality if greater changes are to be implemented.*

[YIC member]

Witness: Dave Rockett, Net Zero Educator, Northern Gas Networks

Jenny Wilkinson started by briefly revisiting some of the conversations that were covered in the YIC 2021 February session to help co-design the Education and Skills strategy. In that session the YIC helped NGN think through what the business could do to support young people through education. The clear direction to do more compelling and engaging work in schools around the future of energy led NGN to recruit a dedicated net zero role to design that education programme. Dave Rockett introduced himself, his career journey to this point, and how the YIC can help them engage everybody with the idea of net zero.

2. Attendees

Young Innovators Council

Aiden	Joyce
Alexa	Kaitlin
Amiee	Lucy
Anisha	Mary
Chloe	Maryam
Dhanayus	Nitya
Druvan	Noah
Ellie	Oliver
Georgina	Theo
Holly	Thomas
Imose	Toby
Jack	Yasmeen
Jess	

25 attended out of 32 panel members

Solutions for the Planet

Fran Isherwood	Youth Insights Coordinator
Kat Luckock	CEO (Maternity Cover)

Northern Gas Networks

Dave Rockett	Net Zero Educator
Hollie Scott	Stakeholder Coordinator
Jarred Knott	H21 Project Engineer
Jenny Wilkinson	Stakeholder Manager

Other

Charlotte Allan	CEG (observer)
-----------------	----------------

3. Key Discussion Points

Feedback from YIC pre-session work

A couple of weeks before the session, the YIC were invited to think about some of the best workshops or educational sessions they have had delivered in their school, specifically by external visitors. This was to help us understand the YIC’s perceptions of these experiences in contrast to teacher-delivered sessions, and to ask about the added value of visitors to this generation. We also wanted to find out the specific delivery styles, activities and outcomes that make a workshop like this successful, and what the YIC want and expect to see, feel and learn. During the session the YIC were reminded what the pre-work had been and then a couple of them shared their thoughts. Further pre-work was also shared by email following the session [see Appendix 1].

<p>Jack told us about a visit from Rise Up Academy, an outreach programme that delivers broadcast engineering and technical workshops in schools.</p>	
<p>Workshop details:</p> <ul style="list-style-type: none"> • 2-day workshop • Instructed in detail how to build and set up a working recording studio in school auditorium. • Produced a short, recorded quiz show. • Then had to teach the same workshop to a group of primary school children, without input from the external facilitators. 	<p>Outcomes:</p> <ul style="list-style-type: none"> • Really excellent workshop. • Learned a lot about an industry they otherwise wouldn’t have given a second thought to. • The opportunity to reshare the information with younger people meant they had to keenly engage with the workshop and work out a way to put it in simpler terms to be understood. • Helped put it into their long-term memory.
<p>Jess shared details of an online workshop delivered by Cleveland Police during the covid-19 pandemic.</p>	
<p>Workshop details:</p> <ul style="list-style-type: none"> • Tasks to interact with. • Apprenticeships in the police. • Given choices and options of what activities to do. • A few different provocations with packs of activities, e.g., what evidence you would need to pass a specific sentence in court. 	<p>Outcome:</p> <ul style="list-style-type: none"> • Interactive tasks kept it engaging. • Dislikes passive ‘just sitting’ there sessions, because doesn’t take the information in then. • Wants to work with the police so naturally this was more interesting. • Liked being able to influence workshop direction. • Real-life scenarios helped understanding that choices the police make on a daily basis shape the community directly.
<p>Druvan talked about a workshop with Loud Speaker on public speaking, which they did during their National Citizen Service.</p>	
<p>Workshop details:</p> <ul style="list-style-type: none"> • Split up into 4 manageable sections and along the way taught how to do each of those parts. • Used games, was very interactive, funny, chilled. • Put into groups to work together to present a ‘Dragons’ Den’-style pitch at the end of the day. 	<p>Outcomes:</p> <ul style="list-style-type: none"> • Thought it would be boring but it was ‘actually really amazing’. • Enjoyed the competition element.

Yasmeen had a politics workshop with a guest from the House of Commons/House of Lords.	
Workshop details: <ul style="list-style-type: none"> • Really interactive • Went into detail about how Parliament works • An activity involving trying to pass a new bill through parliament • The facilitator was clearly aiming to open up opportunities for the young people to get involved and learn more about the job options. 	Outcomes: <ul style="list-style-type: none"> • Had thought it would be a generic talk about Parliament and how voting works, but made them feel like they were getting more of an insight into the political side of things. • Felt like they were being asked to think for themselves and present their own opinions. • Very clear that the facilitator loved what she did and was paying that forward.

Table 1: YIC pre-work responses; main room Zoom discussion; YIC 2023 Session 3

Most of the positive outcomes cited in the YIC’s pre-work stem from the fact that the external educational workshops were delivered with an interactive element. This ranges from trying out very practical exercises to build or recreate something, to feeling like they were being asked to consider a scenario, examine the evidence available to them and then make important decisions for themselves.

It was clear from what the YIC shared that they benefited most from those sessions in which they were not being lectured to; they don’t want to be treated like just students within an education setting, but as citizens – an important part of their local communities and the global community.

Gamified activities help the YIC to engage, take things in and remember and encourage independent thinking. In a successful workshop, the YIC want to be given a full and detailed picture, and then asked to offer their opinions, to be listened to, and to be able to make choices based on real world scenarios.

Breakout session

The suggested questions for the 40–45-minute breakout rooms were reintroduced to the YIC, with the understanding that these were a starting point. As ever, the YIC were invited to lead on this discussion of what would make the most effective net zero educational workshop in their school.

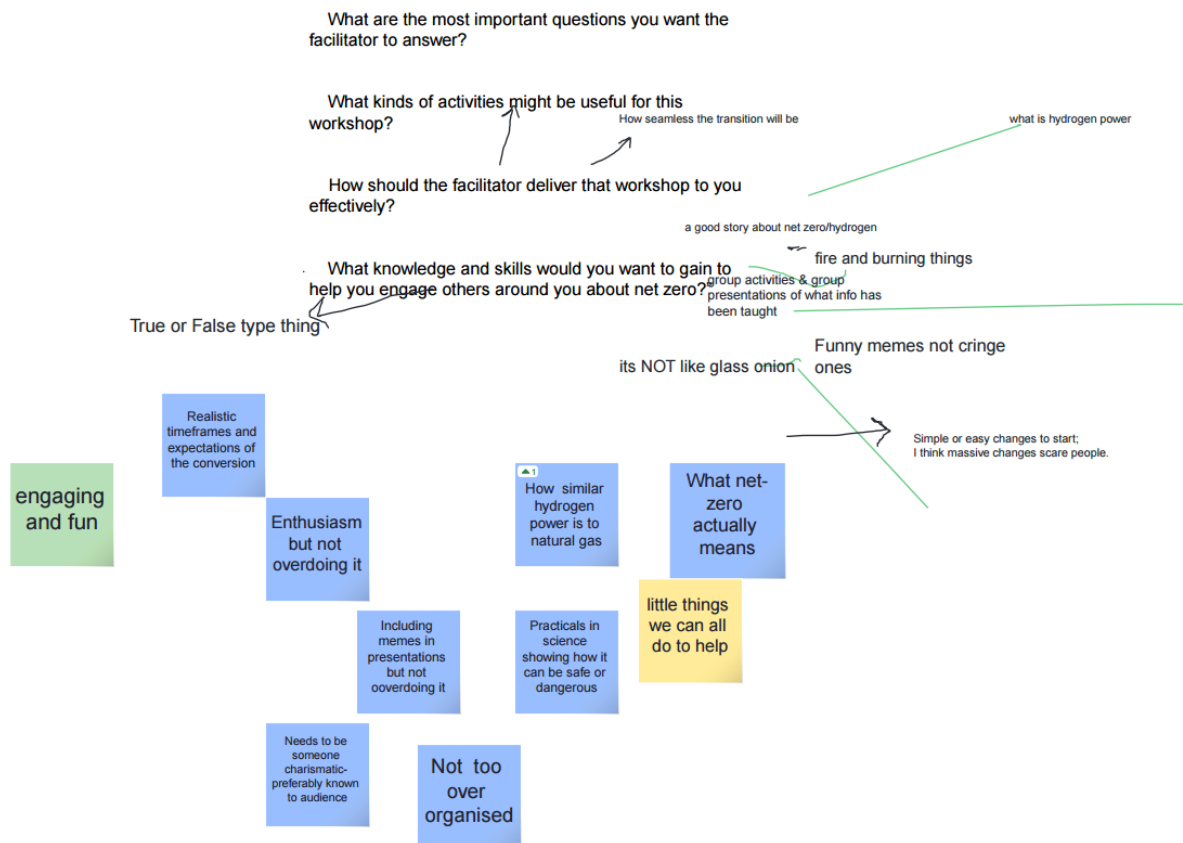
It is worth noting that the following responses from the YIC cover ideas for sessions across the age bracket, so not all activities will be pertinent to all ages. The recommended age groups have been included where they were specified.

What are the most important questions you want the facilitator to answer?
What is net zero?
What is hydrogen power?
What are the similarities and differences between hydrogen and natural gas?
What are our current emissions, both harmful and from renewable energy sources?
What is that in comparison with a choice few other places globally?
What will happen if we continue with our energy sources the way they currently stand?
What are we currently doing to offset our emissions? And do any of these processes have hidden harmful effects?

Are there negative consequences of reaching net zero?
How seamless can the transition be?
To help provide relevant context, what things do individuals do already that help achieve net zero?
Is working towards and/or achieving net zero economically viable for a school with a strict budget, where the priority should always remain educating young people and competitive salaries?
What are the realistic timeframes for converting a school to net zero, knowing that this isn't going to happen overnight?
How do these compare to official timeframes?
Why are the various UK target years set as they are? (E.g. 2050: who decides and sets these targets?)
Where can a school draw the line when measuring its emissions and impact, because everything we do has a carbon footprint: catering, teaching resources, transports, contracts, etc.?
What kinds of activities might be useful for this workshop?
'Show don't tell' examples of how a school can make effective changes using the least amount of money. Perhaps a school could save (or even <i>make</i>) money through working towards and then achieving net zero. Equate their savings to tangible things such as numbers of textbooks or school trips, to exemplify the circular economy work in a school.
A discussion about where responsibility for the current situation and where we need to be going next lies?
Competition: everyone gets given a fake school which they have to guide to reaching net zero first. Invite the young people to design some innovative ideas of what this school might look like.
Have each group of young people share the workshop with peers or another age group, to help solidify the learning.
A website where each young person/teacher/household/school, etc. can calculate their carbon footprint. A rewards system for keeping track of this. Good way of bringing the topic home for everyone to begin with.
Key debating points from both side of the argument for net zero shared and discussed, to help put us imagine the counterargument and respond effectively.
Drama scenes of worst/best case scenarios for the planet; visualises the challenge, provides a reality check.
Local/national/international understanding of the causes and effects, with examples from each.
Scientific practical experiments, e.g. demonstrating hydrogen in its safe state.
Problem solving/project managing real life scenarios from this industry.
Find out from schools what their current emissions are and set realistic targets with timeframes, investigating unknown/unvisited parts of the school, to contextualise.
Treasure hunt tour of environmentally impactful hot spots, e.g. paper, generator, car parks, etc.
Come in and don't sit down with hands up for answers straight away (or even at all, if it can be avoided). Get movement into the room straight away by facilitating some of the knowledge sharing, questions and discussions as physical activities, e.g. physically moving to one side of a room to represent one side of an argument/spectrum, creating a physical sliding scale of opinion, moving for every piece of information or action they do/don't know about.
Games of facts and myths activities, with an example of what is true/false about the ins and outs of this topic.
How should the facilitator deliver that workshop to you effectively?
Always contextualise every topic back into the world of these young people, in this school, town, climate, demographic, etc.
Can you use celebrities for some of the messaging?!
Share anecdotes of firsthand experience from within their sector, and other relevant industries. It marks a difference and makes the conversation more relatable than from a teacher or just what is on the curriculum.
Engaging, entertaining and passionate, without alienating anybody by making it inaccessible or 'nerdy'.
Talk about the topic from an NGN perspective, acknowledging the role of the gas industry.

Make sure you always ask them for their views, even if it creates debate.
Workshop not presentation.
Simple or easy things to start with – massive changes scare people.
Setting the scene, the enormity of it all, the scale – then bringing it down to our level to make it relatable. It is such a huge issue, so broken down to UK? Region? Town? Most people do know what climate change is and how it can and will affect them, so bringing into their living rooms, daily lives, will help them to care.
Use language that is relatable and understandable; and age appropriate means a difference even between Year 7 and Year 8.
Avoid threatening and frightening – instead use positive reinforcement with ideas and decisions coming from the room to create action and inspire a want for change.
Facts and stats aren't useful without relevance to that room and those young people.
Videos and visual aids should only be used sparingly to bring people back into the room or at key touch points only, e.g. before an activity or plenary.
Make sure the content is up-to-date, new information, because a lot of the environmental conversations we will have heard before.
What knowledge and skills would you want to gain to help you engage those around you about net zero?
It's often very difficult to properly integrate the idea of net zero and all the topics that surround it into people's lives, because many people are continuing learned and habitual behaviours. Therefore, what we say based on our understanding and belief might not affect some people. We want to be able to be able to contextualise that, with accessible language, to truly change things.
How to mitigate any media messages that blame the current situation on individual consumers making bad decisions. Help us to share ideas about government policies like pollution permits and carbon taxing, instead of assuming the public don't care about their actions. E.g. include positive examples of how government policy or big business strategy is working well in places, to help us and those around us feel more empowered to put pressure on.
Nominate a pupil leadership groups for things such as keeping track of the school's progress, organising extension workshops for anyone who wants to learn more.
For the harder to reach young people, to get them to care and listen, to actually think about what they're doing, what they're family is doing, what the school is doing, to harm the environment: provide very straightforward and easy to keep up daily tasks to do – giving them motivation.
What aspects of net zero make it pertinent to our generation? Travel – we all want to travel and see everything, but nowadays there are parts of the world that we are losing or have already lost with very obvious climate damage causes. Animals becoming extinct and the prospect of talking about them to your future children only through story books and fossils in museums. Careers – examples of what you can do after education that won't exist if we don't save the planet.
Resources and examples mentioned by the YIC
Mock COP
Hello Hydrogen
EDF Energy Net Zero Challenge
A rowing machine race between teacher and student; the presenters having fun is infectious to the young people and leaves them with the memory of an event as opposed to just a talk.
Kahoot! to help set the scene and get everyone involved straight away.
Minecraft Education
Orkney Harbour using hydrogen energy
Tom Scott on YouTube: geothermal energy in Iceland

Table 2: Summary of breakout room discussions; YIC 2023 Session 3



debating conference

debate - contrasting opinions of individuals who are reluctant to change

calculate/track your own carbon footprint

currently my school doesn't recycle because it can't afford to and teachers can't recycle school work at home

How small actions impact your own area - dramatic examples.

encourage teachers to take changes in school

Design competition of their own idea of a net zero school

Debating who is mainly responsible for securing a net zero school and what they can do to achieve it

there is lots of printing sheets in schools so more computer work

Competition which simulate an individual school for everyone and whichever school reaches net zero first wins

competitions between each department at school to reduce their carbon footprint

Calculate individual carbon footprints

positive examples of people positively impacting the environment

in school debate

Figure 2: Example screenshots from breakout room discussions; YIC 2023 Session 3

Feedback responses

Some of the questions that the YIC were asked in the feedback form for this session are pertinent to the session objectives, so are highlighted here. The remainder of the responses are in Appendices 2 and 3.

How long should this educational workshop be?

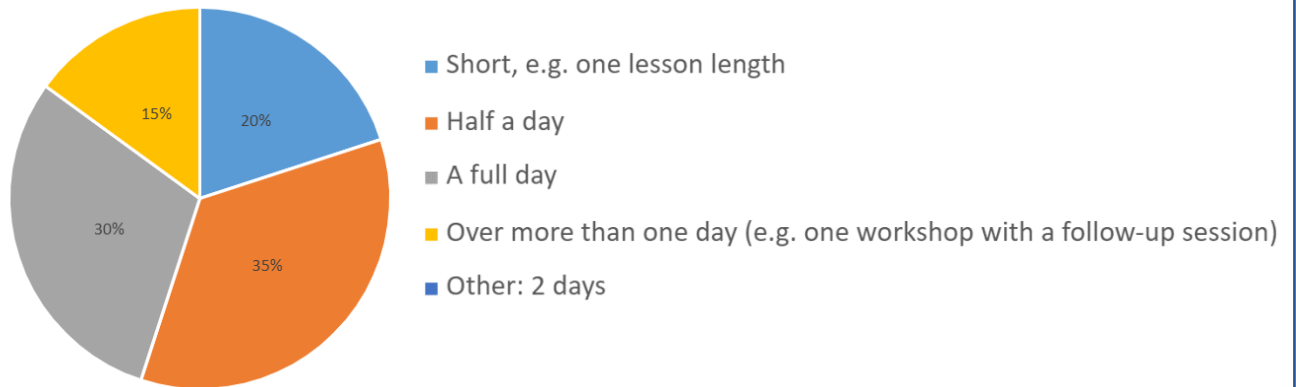


Figure 3: Topic-related graph 1 extracted from feedback form responses; YIC 2023 Session 3

At what stage of school do you think this workshop should be delivered?

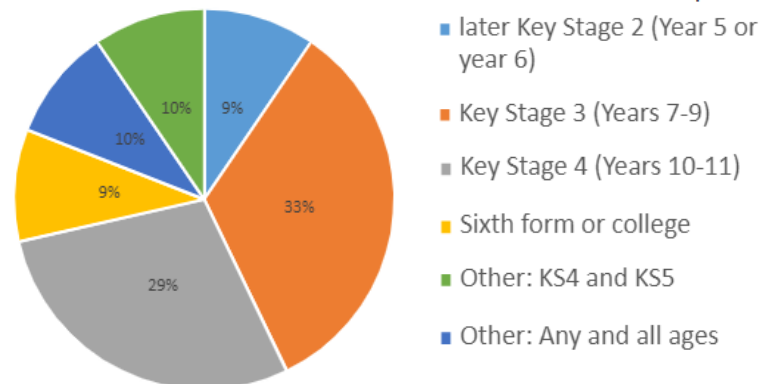


Figure 4: Topic-related graph 2 extracted from feedback form responses; YIC 2023 Session 3

Does your school track its carbon emissions?

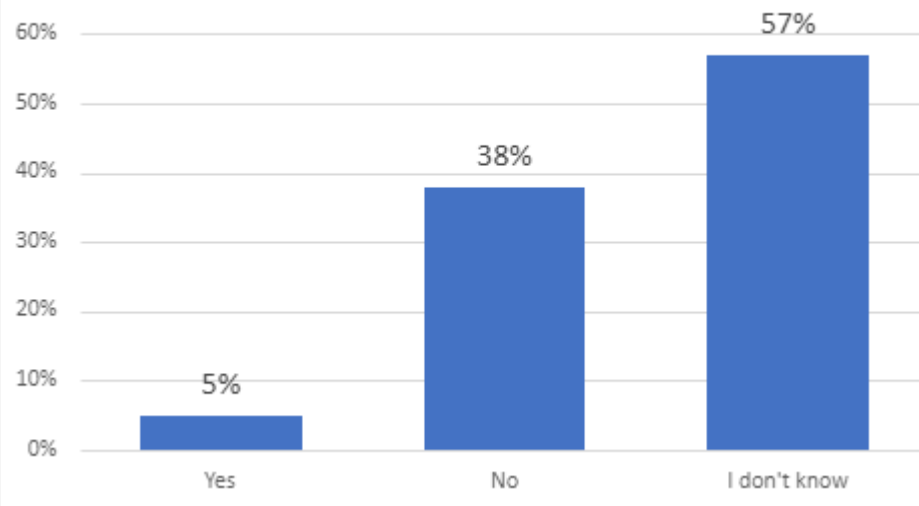


Figure 5: Topic-related graph 3 extracted from feedback form responses; YIC 2023 Session 3

Do you get taught about net zero in school?

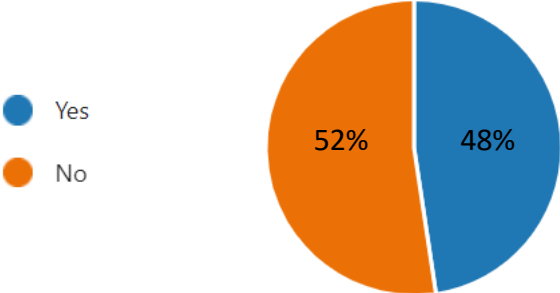


Figure 6: Topic-related graph 4 extracted from feedback form responses; YIC 2023 Session 3

Has hydrogen as a green energy been talked about in your school lessons?

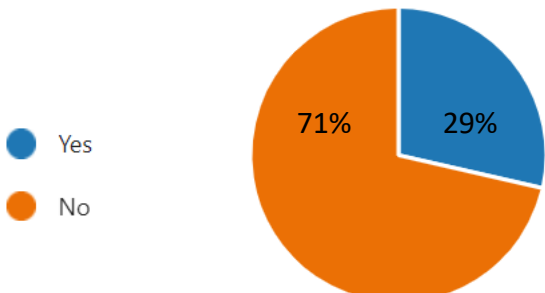


Figure 7: Topic-related graph 5 extracted from feedback form responses; YIC 2023 Session 3

4. Key recommendations (priorities)

The Young Innovators Council all stressed that it was important first and foremost for an education programme on the future of energy to explain exactly what net zero is. For older age groups, the nuances of how different companies and different agendas might answer that question should also be considered. As this topic still isn't covered extensively in the curriculum, it is important to a number of the YIC that hydrogen in the field of other future energy options is also explored. **Children and adults alike still don't know about net zero, hydrogen gas or hydrogen as an energy source, so prioritise the necessary facts in straightforward language and relatable terms.**

The YIC were very clear that they don't want this to be anything like a lesson. If it's going to be delivered in schools, which they clearly agree with in order to engage as many young people as possible, it should feel like something different, exciting and important. The YIC don't want to be spoken at but spoken with. It is more engaging if the speaker displays enthusiasm and passion, but that only works if it remains relatable to the young people. **A successful session doesn't overload with too much complicated or negative information, but with the knowledge that they are decision makers with a stake in this (by applying skills and knowledge to relevant scenarios or relatable situations).**

On that note, a number of breakout room discussions commented that they don't respond well when they feel they are being told to do things. There is already a lot of coverage both in the media and in education about the climate crisis, and especially about what individuals could and should be doing to tackle it – and the YIC see this as negative reinforcement, and an excuse for their age group to disengage. An effective workshop on net zero shouldn't come with any prerequisite or business agenda. **Gamification (i.e. through debate, quizzing, self-assessing or invention) of how reaching net zero is something already applicable to their lives will help young people to understand and attempt to engage those around them.**

The YIC voted on their favourite ideas and recommendations that were fed back from the breakout rooms:

1. Use Minecraft Education – it is a largely shared language across the age groups (for those that use it) and therefore very relatable, and as not all schools are able to afford this resource full time, it is a point of difference that NGN can bring into the school setting.
2. Talk to the young people as human beings, not as children. It will make it clearer that this topic affects them directly.
3. Practical activities and experiments demonstrating hydrogen will be memorable.
4. Answer 'What is net zero?' and 'What is hydrogen?'
5. Both the positive and negative of all discussions should be shared, to allow everyone to make their own minds up.
6. Rewards based activities work.
7. Explain why this is both an international AND a local goal, with positive examples.

5. Conclusion

The Young Innovators Council want this topic to be brought to them in their schools. When asked in an exhaustive multiple-choice question in the session feedback form, most of them thought this type of education programme should be delivered in Key Stage 3 or 4.

However, the session discussions suggested that there isn't a 'most impactful' year to deliver it, because everyone is going to play a part in one shape or form. Younger years should definitely be brought into the discussion as well, even if it's not in as much detail, in order to provide an overview and get them involved early and know their impact. Perhaps it would be beneficial to design a programme of activities for each key stage/age group that builds on the previous stage's learning and progresses knowledge and skills, rather than just focusing on one age group.

For this group of young people, repetition of negatives is counter-productive and risks tuning it out. A number of YIC members felt that the current media line is overwhelmingly to shame individuals as irresponsible and to claim we have damaged the planet to the point that there's no use in acting now to achieve net zero. The YIC reiterated throughout their key recommendations that it is paramount when addressing young people across the board to establish them as the future solutions to these problems, and the planet.

The YIC acknowledged that there are generational gaps in attitudes to this topic, and also that government and big business have an enormous role to play. With this in mind though, each breakout room called for the objective of this sort of education programme to prove to young people that they CAN change the world if they put the effort in now, that there are things THEY can do to make a difference.

There was little discussion in any of the breakout rooms about how this education programme might incorporate NGN's Customer Energy Village (CEV) and Hydrogen Home. This could be due to the breadth of the topic or simply because the organic nature of the conversations didn't go in that direction. It was observed that any number of the activities highlighted by the YIC could be carried out on sites away from the school setting for a point of difference, but that it is equally engaging to bring this work into schools. This could also be an objective that warrants further detailed discussion with the YIC.

6. Appendices

Appendix 1: Pre-work shared by YIC members

Lauren H

Pre-work:

We once had a visit from a company that recycled plastic and made it into other products such as hairbrushes, it was interesting seeing the process that they took and it they were very informative about the process which made it more interesting, they also did workshops where you could see the different products which made the visit really worthwhile.

Nitya S

The session was someone who came to share their experience with drugs and addiction, their talk was very informative and the delivery was excellent.

1. Someone different delivering the session than our teachers meant that my peers and I were far more interested in hearing what a brand-new personality had to say. Someone external delivering a speech means no teachers lecturing about rules and behaviour beforehand which makes people uninterested in what they (the teacher) have to say.
2. The facilitator was extremely passionate about their story; they actually wanted to deliver that session to us (my year group), and they genuinely wanted us to understand the seriousness and severity of the topic in question. They were concerned for the future of young people and took their talk very seriously. They were:
 - Passionate
 - Dramatic (gave jarring examples of what drugs and addiction can do)
 - Knew what they were talking about.
 - Interested in what they were talking about.
 - Connected with their audience by being so relatable.
 - Made the topic they were discussing approachable and people actually listened to what they said.
 - Told us how easily we can fall into drugs and eventually addiction.
3. From educational workshops I usually get:
 - The expectations of the company - what they believe in (principles and ethics) and the standard they expect employees to uphold.
 - The qualifications required to get into a particular industry.
 - Alternative ways to get into said industry, which divert from traditional academic methods, e.g., sixth form, uni, etc.

The main thing I usually get is how to get into the industry being talked about and the beliefs of a company operating in said industry.

Kate H

My most memorable workshop was in primary school when the fire service came in and educated us about what to do in the case of a house fire. It was very interactive, they even let us try on their uniform to engage us. I still remember the information they told us even though it was about 7 years ago now. I also remember in year 8 we had some paramedics who came into school and taught us CPR. This was just an hour session but was very engaging due to practical work and I learnt a lot from it which I still remember. People were excited to learn CPR and talked a lot about it before and after, some of my friends still refer to it today as we had a laugh whilst also learning a valuable life skill.

I believe practical work is always good for workshops as it allows students to be engaged with the activities. Also working in a team with friends makes the sessions more enjoyable rather than being like a lesson. The longest a session should run in my opinion is half a day, any longer than that and people can lose focus. But this also gives enough time to deliver lots of information.

Henry S

The workshop was run by a local games development company. They came to our 6th form and set us programming challenges; they gave us the code to a simple game they had created, and we had to add features to it.

- They had a more in-depth knowledge about coding and so the challenge they set us was different to anything our teachers would have. We could also ask them questions about their industry that they could answer better.
- We were exposed to code more difficult than we'd seen before, which was a nice authentic insight into the industry, however the task we had itself was still accessible to us.
- It's an experience they can talk about in interviews, CVs, UCAS personal statements etc.

1. What are the most important questions you want the facilitator to answer?

The actionable, realistic ways our school can reduce its emissions. Alternatives to our current systems that have a carbon footprint.

2. What kinds of activities might be useful for this workshop?

Creating an action plan specific to our school of how to reduce emissions, using a combination of info provided from NGN/ online research. Split into teams that each come up with their own plan, present to panel of judges from NGN/ school leadership, team with best plan wins.

3. How should the facilitator deliver that workshop to you effectively?

Giving us a clear structure to follow, so we don't lose track of what we're doing.

4. What knowledge and skills would you want to gain to help you engage others around you about net zero?

Practical ways to reduce carbon footprint. Knowledge on the most polluting activities we engage in.

Appendix 2: Further detail of feedback form responses pertinent to the session topic.
 In response to 'At what stage of school do you think this workshop should be delivered?'

Why?
KEY STAGE 2
Influence the younger generation in the prime time to shape their minds.
The sooner the children know, the better.
KEY STAGE 3
These students have just joined secondary school, so are more sophisticated than primary school students and are therefore more likely to understand it. They also aren't too old that they have other things, e.g., exams to think about. They are eager to learn having just moved into a new school.
They tend to listen more and care more at that age.
I think it is that time when school kids begin to become conscious about global issues.
As people are old enough to understand without it getting in the way of studying
I think that by delivering it to somewhat higher year groups you give the participants a chance to form their own opinions.
Younger years might find it difficult to understand or not really be bothered by it, and older years will be more focused on exams, so I believe KS3 is the best time to do it.
I mean I would love to do it and I'm in sixth form, but I bet KS3 would be the best because Year 5-6 might not understand, Years 10-11 may be busy with GCSEs, and college students are focused on university.
KEY STAGE 4
They will take the information more seriously and take it on board, whereas younger children may not fully understand.
It's best to start young, teaching people about it, but not too young. KS4 is when students start to mature and are sensible enough to learn about it.
People have more of an understanding of the topic and its importance already so that they can contribute to discussions more.
At this age group students generally have an idea about the topics that surround the conversation of net-zero. They can understand the impacts of our actions on the environment, but they can also understand the economic implications of achieving net-zero and understand that net-zero isn't as easy and straightforward as it may seem.
They will have the foundation knowledge needed to understand it
A little more mature by Years 10-11.
SIXTH FORM OR COLLEGE
It's most important for this year group to have experiences to draw from as they are about to enter the working world.
More likely to listen.
OTHER: KS4 AND KS5
They are the ones mostly able to apply what they learn into society and are the ones that are able to sympathize with the most of the situation of climate change
It gives the older years a chance to see different perspectives that they can understand, younger years may not fully grasp the importance of the workshop.
OTHER: ANY AND ALL AGES
It will affect everyone at some point so I feel like everyone should be included.
There are a lot of misconceptions and a lack of knowledge of the topic overall and it would benefit more people if it covered a wider age group instead of one targeted age group.

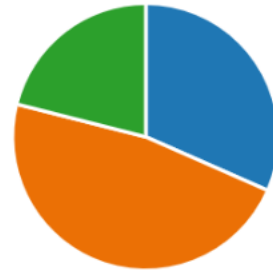
What are your views on net zero and future energy solutions being taught in schools?
I think it is a good idea as these are things which will become more prominent in the future.
I feel that it is important to talk about this in school and that it definitely doesn't get enough airtime because PSCHE lessons are so limited and poorly organised anyway, a half-hearted 20 mins a week. There isn't really a chance to talk about net zero in school and not everyone gets to learn about it.
It is very important as the pupils who listen will drive for change in their later life.
Sounds interesting and would be something I'd like to learn about. It's also beneficial to not only the students but to the teachers as well as they may have never learnt about net zero as kids either.
Good idea.
It is very important as it will most likely be a very prominent thing in the future when we are older.
Good idea if it's feasible.
I think that it should be taught from a young age. All the way through school. Everyone needs to think with this mentality if greater changes are to be implemented.
It should happen but there isn't the general knowledge about it.
I think it's an important part.
I think they should be taught as people should be educated and aware about the environment and the impact our actions have on our area. Discussions surrounding net zero and further energy solutions also open up a career possibility for students who may be confused or may want to impact the world around them but don't know how.
Could be added to the chemistry curriculum as you cover stuff similar to it.
We should definitely teach about net zero goals, but hydrogen is just one solution (if it can even be counted). I reckon that we should be teaching about alternative energies like solar, wind, air-source, etc. instead of pushing people to switch from one fossil fuel to another. Teaching about climate change and solutions is important though, and if these workshops get families thinking about alternative energies and their benefits then I am all for it.
I think it's good because then everyone can help the planet.
Essential
Be good to start with kids
Should be taught
I think it is a very interesting topic that not a lot of people are aware of and could really benefit us if it was more widely taught.
Net zero is achievable, but it can only work if everyone who would be involved would be able to compromise on circumstances, e.g., funding, infrastructure, and the change it will bring to society.
Much needed teaching point
It's important.

Appendix 3: YIC 2023 Session 3 feedback form remaining responses

1. Do you feel that you were given enough information about this topic?

[More Details](#)

Strongly agree	32%
Agree	47%
Neither agree nor disagree	21%
Disagree	0
Strongly disagree	0



2. Do you feel that you had the opportunity to contribute to the discussions in this session?

[More Details](#)

 Insights

Strongly agree	63%
Agree	37%
Neither agree nor disagree	0
Disagree	0
Strongly disagree	0



3. Do you feel that your ideas were listened to?

[More Details](#)






 Insights

Strongly agree	42%
Agree	47%
Neither agree nor disagree	11%
Disagree	0
Strongly disagree	0



4. Was it clear what NGN wanted from the YIC in this session?

[More Details](#)

 Strongly agree	53%
 Agree	32%
 Neither agree nor disagree	16%
 Disagree	0
 Strongly disagree	0



[Extracted July 2023; sample size 21]