

SHAPING A SUSTAINABLE FUTURE

ANNUAL
REVIEW
2023

Andrew Musgrave

IGEM President 2023-2024



In May 2023, when I started my IGEM Presidency, I set out three key themes for the year ahead.

First to help us focus on the safety and reliability of the gas network today, second to fully support and engage with IGEM's Sections, and third to place equity, diversity and inclusion at the top of our agenda.

This certainly has been a year where we have seen people getting back together. Our Gas Utilisation Conference, Policy Conference and Annual Conference were all very well attended and provided a fantastic opportunity to hear from some great speakers as well as network face to face with one another. The same goes for the Sir Denis Rooke Memorial Lecture where we were delighted to hear from Louise Kingham, Senior Vice President, Europe and Head

of Country, UK at BP who discussed with us her views on the future of natural gas in the UK and globally.

Whilst the future journey we are on to achieve net zero remains uncertain, the absolute certainty that faces us today as professional engineers and managers is that we must ensure that the whole gas system remains safe and reliable for the domestic, industrial, and commercial customers we serve. This was the focus of our Annual Conference and we have received fantastic feedback from across our sector.

I would like to commend the great work across our Sections with a diverse range of webinars, conferences, technical visits, and social events. I have thoroughly

enjoyed joining you at many of these events and can personally testify to the hard work of the volunteers within our section committees to plan and organise their event programmes. My focus this year was on encouraging more face-to-face events and meetings, getting us out from behind our screens and spending time together to network, share knowledge and experience, and learn something new.

My wife Sarah and I were privileged to join many of you at social events throughout the year and had a wonderful time visiting your areas and spending time with members of your local Sections. We also enjoyed hosting many of you at the President's Ball in London where we were able to catch up with so many friends and colleagues for



03 The President's Year

a lovely evening. Meeting so many of you this year has been a real pleasure.

Throughout the year we have maintained a very strong focus on equity, diversity and inclusion with many well-informed debates at IGEM's Executive Board and Council meetings. I know that this has also had a strong focus out in our Sections as well. It is important that we follow through on our best intentions and I have been really pleased to see the progress we have made this year. This was always a long-term goal and I am delighted that this endeavour has the full support of our Presidential chain over the next few years.

In April, I am looking forward to travelling to Asia to visit members of our Far East



District Section and, along with IGEM's CEO Oliver, we hope to strengthen our overseas ties and help them to continue to build on the great work they are already doing.

Many of you are involved on a voluntary basis and I would like to thank you for your time and dedication which is at the heart of a successful and vibrant charity organisation.

Finally, I want to express my thanks and admiration to the IGEM team who have worked so hard this year to ensure we have an Institution that we can all be proud of.

IGEM's membership is growing, the financial position is strong, its technical publications are world-class and we remain a well respected organisation; so thanks to all of you for playing your part.



Oliver Lancaster

Chief Executive Officer



What an incredibly busy and successful year it has been; thank you for all the support and engagement throughout 2023. It's been a diary challenge to get around all the Sections and try to meet with many organisations who want to connect – but it's very much been worth the effort.

I've been delighted to welcome so many new Individual and Company members, support new and updated training courses, push our activity on social media, speak at a broad range of events, and discuss with policy makers and regulators the evidence that we're accumulating in support of positive decisions of the future of the gas grid.

But it's worth mentioning up front that we've broken a few records this year too. In 2023 we had the biggest increase in numbers of individual members since modern records began, we have the

most Company Members we've ever had, and we've sold the most technical standards ever! Quite an achievement!

The secretariat has completed an outstanding amount of work over the past year – noting the launch of our new website at the start, delivering on innovation projects, publishing new hydrogen technical standards, integrating a new direct debit system, streamlining our financial accounting system, increasing room hire bookings for Meetpoint Midlands, and much more.

I'm also grateful for the continued support, challenge, and oversight we get from our governance structure across Council, Executive Board, committees, panels, working groups and other volunteers helping our sector in many ways. I specifically want to thank David Parkin and Andrew Musgrave who have both done a tremendous job of leading IGEM as President over the year.

It was great to bestow the Honorary Fellow grade to five successful nominees at the Presidential Address on the day of the Gas Industry Awards. We look forward to continuing to make this award, and the award of Honorary Companion.

You may have noticed that IGEM still doesn't have a new Patron since the passing of Her Late Majesty Queen Elizabeth II. All the Royal Patronages have not yet been reviewed since Charles III became King, and the Coronation put delays on such matters. We'll let you know when we have news to share regarding the letter of petition IGEM sent to Buckingham Palace.

In other good news, our new Business Plan was approved by Council in May. Since then, we have been getting to work delivering against new areas of ambition, which is monitored and reviewed for progress by Executive Board.

Our Equity, Diversity and Inclusion Advisory Group has grown with membership and trustee representation, as well as nominated leads from each department in the secretariat. In a busy year, examples of activities undertaken include two well-attended and successful Women in Gas events and a very informative unconscious bias webinar. The group is diligently working on an EDI strategy and action plan.

It was a joy, finally, to be able to visit the Far East District Section. I joined Ben Clarke, who was the guest of honour as Past President, on a busy

schedule of engagements with company members, site visits, business dinners, industry bilateral meetings and presentations in Hong Kong, Suzhou and Shanghai. It was also a pleasure to be hosted by IGEM's Ambassador in India, Nitin Patil, who arranged meetings with the Petroleum & Natural Gas Regulatory Board and two gas network CEOs on a short stopover in Delhi. This is helping us to understand how we can develop membership and uptake of our technical standards in India.

It was another great year for our packed programme of conferences and events, with Louise Kingham from bp taking the stage as guest speaker at our Sir Denis Rooke Memorial Lecture, a bustling Gas Utilisation Conference in Solihull, an excellent Policy Conference in London, our Annual Conference in Nottingham focussing on keeping our eye on the ball with the job in hand today, our successful Gas Industry Awards, the Past Presidents, Honorary Fellows and Companions Lunch, and a very entertaining experience at the President's Ball at The Savoy, London.

With external events, it was an honour to again help develop the gas sector content for Utility Week Live, and to put on

two separate IGEM sessions on the Innovation Stage. We also supported and spoke at other events, including the Northern Ireland Renewable Gas Conference in Belfast arranged by Phoenix Energy, Solar & Storage Live at the NEC in Birmingham, InstallerSHOW, wider Utility Week events and many more.

We were delighted to be invited to have lunch on the dumpling of the below ground gasholder being refurbished for a large development project in Granton, Edinburgh. This seemingly bizarre appointment was diarised as an opportunity to replicate, in a much less formal way, the IGEM lunch held on that same dumpling before the gasholder was commissioned back in 1901. It was helpful to combine this visit with a trip to see the progress being made at H100 Fife and to get the lowdown at a biomethane facility in Glenrothes.

Other visits of note include Riverside College in Widnes who've recently opened their hydrogen rig for students to learn new skills, Tata Steel's pipe manufacturing site in Corby, Toyota's factory for the launch of the East Midlands Hydrogen Cluster that IGEM is at the very heart of, and to a primary school to present and lead a workshop with 100 children during Great Big Green Week.

Perhaps a stand-out visit in 2023 was to Ofgem's HQ in Canary Wharf to deliver and present their certificate of accreditation for their Professional Engineering Development Scheme after our assessors confirmed their meeting of the requirements set out by the Engineering Council.

The secretariat has had a few changes, with us giving a very warm welcome to Yusuf Girach who joined us in February as our new Head of Finance. We also welcomed our new Graphic Designer, Lewis Marston, our new Professional Development officer, Kelly Smith, and our Digital Engagement Manager, Jordan Strachan. It was also wonderful to welcome back three of the team from maternity leave, and to celebrate 20 years of service for Lesley and Tracy, as well as Peter's 15 year and Sharon and Jenna's 10 year work anniversaries.

At IGEM House, we were pleased to share the news that we now purchase locally produced biomethane for all the gas we consume in the building – which is significantly contributing to the reduced business emissions of the institution.

Transitioning to **net zero**

Once again, innovation has been central to a lot of our work in 2023, with projects including the development of the Hydrogen Downstream Skills and Standards jointly with EU Skills, which is critical for the delivery of trials in the Government's Hydrogen Strategy. We've also concluded the work with Celsa Steel on a feasibility study, funded by the Department for Energy Security and Net Zero (DESNZ), to decarbonise one of their steelworks with hydrogen mills, in addition to their existing electric arc furnace.

We're also supporting a project to retrofit hydrogen to an unoccupied housing association home in Wales. This is to test its use, the benefit of additional building retrofit and providing an essential source for education and a place to train installers, whilst road-testing the new hydrogen downstream skills and standards for retrofits.

We've also come to the end of a small project with Cadent to test whether heritage gas lighting can run on hydrogen in the event of gas grid conversion, or indeed earlier isolation and supply. We've been pleased to see this succeed and communications will follow, as hopefully will a next phase towards demonstrating outside of laboratory conditions.



It's been encouraging to support the industry through our engagements with Government. Our activity with DESNZ has involved working with their Heat Strategy team and the publishing of their work on total system

cost which they undertook with Imperial College London. We were grateful for opportunities to meet with one of the main authors of Chris Skidmore's Mission Zero – his net zero review report – to discuss the missing aspect of hydrogen deployment across the economy, rather than as a sector-by-sector assessment. The opportunities were also taken to write directly to the new Secretary of State in DESNZ, including to welcome Claire Coutinho to her new role.

Engagements with Ofgem's leadership took some strides this year, with useful discussions regarding domestic heat and the location of distributed industry, large commercial businesses, and flexible power generation sites, as well as being able to input



into the team looking across the economy for the energy system transformation.

The main political party conferences were, again, an excellent opportunity for the President and I to support members and wider industry in the exhibition space on the Hydrogen Zone, attend some of the insightful fringe events, have pre-arranged meetings with business leaders, and take advantage of efficiently being under the same roof to catch-up with many of our stakeholders.

We continued our involvement with the Energy Research Partnership, which is a small group set up by a previous Chancellor of the Exchequer to provide high-level leadership on energy research and innovation that's co-chaired by the DESNZ Chief Scientific Advisor, including our support for a plenary event on the decarbonisation of the gas grid.

Our involvement with the Parliamentary Group for Energy Studies (PGES) has expanded, with myself now having been voted onto their Executive Council. It's on here that I get to be involved at a working level to arrange speaker events, including a timely event on Steel early in 2024. Also in early 2024 was the PGES Winter Warmer Reception, sponsored by IGEM

– a first for the institution and a great opportunity to present some ground-breaking research on the different connections to the gas grid.

Work with the Devolved Administrations has continued in 2023, including supporting the development of the Welsh Government Heat Strategy. Again with Welsh Government,



IGEM hosted and chaired a workshop for housing associations to demystify hydrogen as a credible option for decarbonisation of their housing stock, which was very well received. Some helpful engagement took place with the Scottish Government around their programme of hydrogen activity and where we may be able to support one another. And then there was the opportunity to engage with senior civil servants in Northern Ireland linked to

the renewable gas conference organised by Phoenix Energy.

I was pleased to put together some more opinion pieces over the year to build on those from 2022 that I hope were helpful and an interesting read, covering 'Is hydrogen clean enough to tackle the climate crisis?', 'The net zero reset: kicking

the can or pragmatic shift?', and a response to the Climate Change Committee's report 'Delivering a reliable decarbonised power system'.

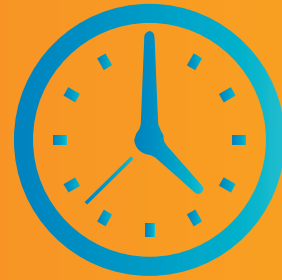
IGEM will, of course, continue and increase its role in supporting the transition to net zero, and we look forward to working with you on making progress.

THANK YOU TO OUR VOLUNTEERS



608

Volunteers



11,524

Hours of support

Annual plan and standards development

The Technical and Policy team delivered their most successful year working on the annual departmental plan for the revision of existing standards while at the same time managing the production of new standards for hydrogen. We have seen volume sales of hardcopy standards increase by 14% and licenses increase by 37%.

10 Technical Standards

All technical committees, expert panels and working groups were involved in 123 meetings, resulting in the department producing 267 technical papers and publishing 16 standards throughout the year, all of which can be found on the IGEM website.

Hydrogen

Throughout the year our Hydrogen Committee continued to grow in strength and provided the governance and leadership in the production of new hydrogen standards. The committee is helping to support the UK Government's commitment to achieve net zero carbon emissions by 2050 and our strategic plan of working with key stakeholders on a range of research and demonstration projects investigating the role of hydrogen within the national transmission and distribution system.

Early in the year we undertook a funded review for the technical requirements for the construction of a new hydrogen pipeline and associated pipework as part of a CELSA Steel study to assess the viability of operating the reheat furnaces on hydrogen gas.

Throughout the year IGEM worked with industry experts on the Department for

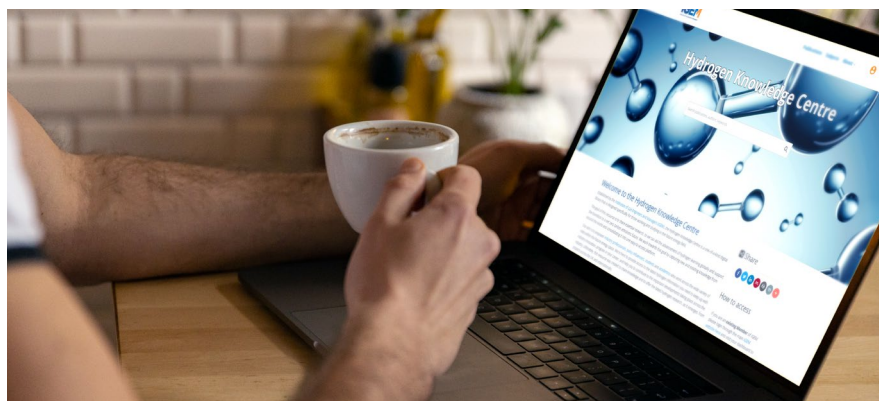
Energy Security and Net Zero (DESNZ) funded Hydrogen Standards and Skills for Heating programme for the implementation of a competence framework for the community trials for hydrogen. The IGEM working group successfully delivered the two new standards to support the training for engineers working on the trials.

Towards the end of the year we began work on the Ofgem funded project led by SGN and partnering with the gas distribution networks, National Gas and DNV on the Velocity Design with Hydrogen Project. This project will demonstrate the safe velocity limits for hydrogen, and hydrogen blends, with a focus on erosion, vibration, noise, and particle transportation.

Hydrogen Knowledge Centre

The digital repository, dedicated to the advancement of hydrogen learning globally and supporting the transition to a net zero carbon emissions future, continues to go from strength to strength. At its core, the Hydrogen Knowledge Centre enables learning to be shared with others, through a carefully curated, comprehensive and growing database of information from the widest possible range of sources.

The repository, managed by a dedicated team at IGEM, has grown to include over 4,500 resources. By the end of 2023 the platform had been accessed on average 3,800 times per month with around 160 downloads per month.



Hydrogen Knowledge Centre



+11%
users (35k)



+3%
pages viewed

2022 vs 2023

Large Business Forum

The IGEM Large Business Forum (LBF) fully supported Gas Safety Week and continue to highlight the critical importance of staying gas safe when working in the built environment and renewed its appeal to gas professionals to spread the word amongst fellow tradespeople of the dangers of interfering with existing gas installations when working in buildings including Fire Safety professionals and 'fire stopping'. They have also supported the popular Gas Utilisation Conference which is tailored for the downstream.



Impacting policy

IGEM's policy role has gone from strength to strength in 2023, seeing unprecedented levels of direct engagement with key policy makers and influencers.

We continued to amplify the voice of our members through responses to several government consultations, including Improving Boiler Standards and Efficiency, Clean Heat Market Mechanism, Strategy & Policy Statement for Energy Policy in Great Britain, Heat Strategy for Wales, Net Zero Sector Skills in Wales and Hydrogen Blending into GB Gas Distribution Networks.

14 Policy and Research

We have also taken great interest in the work of the government Select Committees presiding over energy security and net zero policy, responding to two

stakeholders. Through this work we are supporting our industry in making the case for low carbon gases in our energy system and providing the evidence base on which

We have played a key role participating in the work of several influential groups and organisations, including the All-Party Parliamentary Group for Energy Studies, the All-Party Parliamentary Group for Carbon Monoxide, the NEPC Net Zero Working Group, Gas Goes Green Review Group and Insights Forum, Hello Hydrogen Strategic Review Group, Energy Research Partnership, Palace Yard and Beyond 2050.



Committee inquiries this year, including Heating our Homes and Keeping the Power On.

We have been reactive to important policy news, providing our responses to various announcements and publications, such as the government's Net Zero Review, Powering Up Britain package, Hydrogen Updates to Market and reports by the Climate Change Committee.

These responses have been published on IGEM's Policy, Practice and Research web page, providing a trusted source of information and insights for our members and

policy makers can base their decisions – a recent example being the government's positive decision on blending hydrogen up to 20% into the existing gas network.

These groups see us working directly across industry, academia and government; contributing to research, sharing our knowledge and developing fact-based policy recommendations on the future of the gas grid and how sustainable gases can support the UK in achieving net zero carbon emissions.



Supporting membership

Our annual CPD sampling progressed in 2023 as we saw a record number of submissions from our professionally registered members. Supportive discussions were had, and individual feedback was provided to those who submitted a CPD record, to support with their professional development journey. Those that did not submit a record will be provided with additional support to enable them to provide a submission for 2024.

16 Membership

We have thoroughly enjoyed sampling the continuing development of our engineering professionals and welcome any of our members to submit their CPD records voluntarily if they would like some helpful feedback.

Supporting the industry's bright young stars

We had another successful year with our scholarships, grants, and awards scheme. The scheme continues to support the engineers of the future, and with such a high standard of applications.

Undergraduate Scholarship was awarded to:

Lois Lawal

Postgraduate Scholarship was awarded to:

Thomas Shaw

Engineering Technician Grants were awarded to:

**Lance Newhouse
and
Lewis Litherland**

These successful recipients were outstanding, and we look forward to supporting them with their engineering



careers and hearing about their achievements and ventures. We hope that 2024 brings exciting opportunities to all of our recipients of scholarships, grants, and awards.

Company Members

2023 brought IGEM Company Members real value for money and multiple benefits to their business, and the membership continues to grow. We are now a community of 420+ companies.

This year our Company Members exclusive events brought many influential, connected and technically

competent professionals together, which is a vital ingredient for members to understand the industry and getting known too.

IGEM Company Member events had agendas which were rich in expertise and innovation, presenting a comprehensive view of green gas technology's current state and its potential to reshape energy consumption.

2024 beckons and the message is constant,

"There's lots to do – the deadline is not changing!"

Housing Partners

2023 saw the Housing Partner membership become a reality with some key milestones reached.

In October, one of our key objectives was met when we launched the IGEM Housing Partner Forum which will be a true member led panel for debate, change and sharing of best practice. Their work started with the support of the technical expertise IGEM is renowned for, and they have already set out an exciting programme of activities that will both share knowledge and opinion, with industry decision makers and members alike in 2024.

Individual Membership

It has been a fantastic year for individual membership as we have seen a significant increase in new members, a 63% increase on last year resulting in 4.6% growth in membership (excluding Students). Including Students, our overall membership has increased by 7.5% in 2023.



We are also proud to have helped 162 gas industry professionals gain professional registration and the titles EngTech, IEng and CEng, which is another sizeable increase of 48% on last year. This would not have been possible without the 118 members who generously volunteered their time and expertise as mentors, interviewers, and committee/panel members to support the membership processes and procedures.

In 2023, we have continued our focus to support the technician community and improve the EngTech value proposition. Our EngTech working group has continued

to drive this initiative forward which resulted in an overall 8.4% increase in EngTech membership and retention increased to 93%. We plan to continue this focus into 2024 and beyond.

In addition, we held several professional registration webinars open to all those interested in becoming a member or transferring grades as well as inhouse webinars with the support of our Company Members.

The online 1:1 booking system remains popular for those wanting to discuss their individual pathway to membership and professional registration.

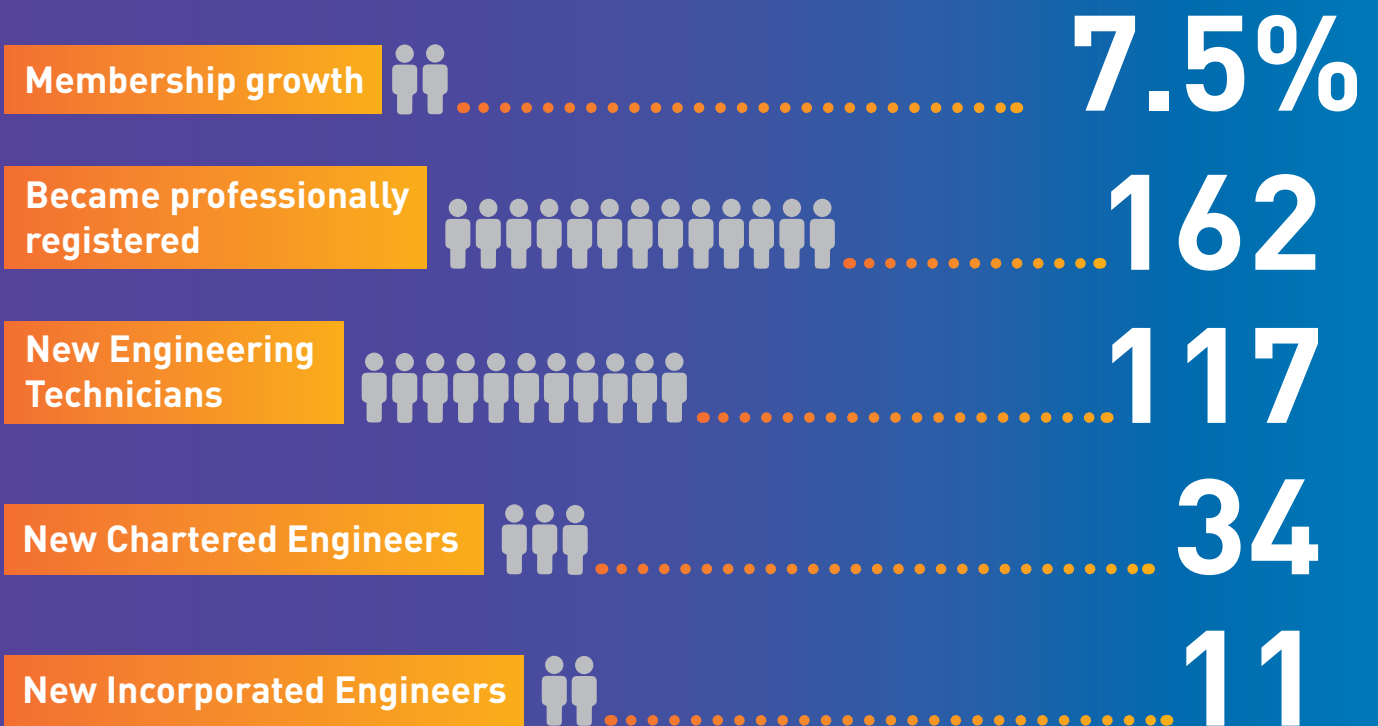
COMPANY MEMBERS

420



INDIVIDUAL MEMBERS

3,597



Staying connected

IGEM's events continued to grow through the year with record attendance to conferences, and keynote speaking events, with the year kicking off with the Gas Utilisation Conference, the only dedicated downstream engineering conference receiving record bookings, and the year concluding with the largest Annual Conference in recent history.

Delivering essential learning and a voice for the industry

In between the Gas Utilisation Conference and Annual Conference, we had the Sir Denis Rooke Memorial Lecture from Louise Kingham, bp's Senior Vice-President, Europe, and Head of Country, UK with an engaging lecture on the "The role of natural gas on the road to net zero".

transition as its narrative and safety and security of the natural gas network at the forefront, it featured sessions on: maintaining a safe gas network today in order to operate a safe hydrogen network tomorrow; how to mitigate threats against a network that is relied upon 24/7, 365 days of the year and is 99.997% reliable; what can we do to reduce or eliminate natural



This was shortly followed by the Policy Conference with over 30% increase in attendance on the prior year, and included a wide range of speakers focusing on the whole energy system planning, domestic heating and flexible power generation – with a keynote session including Department for Energy Security & Net Zero and Ofgem which set the scene for hydrogen across policy and regulation.

In November, IGEM's flagship event the Annual Conference, attracted an audience of over 200 delegates. With energy

gas emissions. Attendees were also able to visit the exhibition which showcased cutting-edge products and services.

Outside of the annual calendar, IGEM also had presence at various exhibitions such as the Installer Show, CCUS & Hydrogen Decarbonisation Summit, Political Party Conferences and held a visit to the historic Granton gasholder to re-enact a lunch first held in 1901 under the crown on the dumpling in the tank of the gasholder, which is now part of the wider regeneration of the area seeing the iconic structure being restored and repurposed.



Hosted webinars

In September IGEM hosted a webinar on behalf of Welsh Government which explored hydrogen's role in decarbonising housing stock.

Technical Training Courses

29 Public technical training courses with over 250 delegates attending.

15 In-house technical training courses

New courses for 2023

Introduction to IGEM/TD/12 Edition 3 - Pipework stress analysis for gas industry plant

IGEM/GM/6 Edition 3 - Non-domestic meter installations. Standard designs

Most popular courses in 2023

IGEM/SR/25 – Hazardous Area Classification of Natural Gas Installations, Introduction and Advanced Practitioner (x 12)

Introduction to IGEM/TD/1 - Edition 6 - Steel pipelines for high pressure gas transmission (x 6)

Hydrogen and the Natural Gas Network (x 5)

IGEM/G/5 – Gas in Multi-Occupancy Buildings (x 5)

Sections

Throughout the year we supported the IGEM Sections wide range of events which accounted for over 50% of the events in the year, providing valuable CPD opportunities for our members. CPD isn't just reserved for IGEM members, and with almost 40% of the events dedicated to training on the technical standards, we continue to provide essential learning opportunities for IGEM members and non-members to ensure the industry continues to provide a safe and secure gas network from beach to meter.

IGEM's Section events, both virtual and in person, offer insight into a variety of areas, alongside these they have hosted many social and networking events to raise money for various charities from Help for Heroes to Teenage Cancer Trust.

Here is just a snapshot of the things they got up to in 2023.

Irish Section

YPPC 2022 winner, Emily Mulcair of the Irish Section delivered a webinar of her winning presentation titled 'Modelling Grid Stabilisation Using Curtailed Wind & Liquid H₂'. The project assesses the feasibility of storing and using liquid hydrogen for power generation using curtailed wind from the Oweninny Windfarm in North Mayo.

The Section also organised two events focusing on Maxitrol and its impressive product portfolio, with a special focus on the incredible Sentry products. Hosted by both Phoenix Energy and Gas Networks Ireland, this event investigated the cutting-edge features of Sentry GS.



22 Training and Events

London, Southern & Eastern Section

During the year the Section held many webinars and events including the return of the London Showcase and Lions' Lair in February in collaboration with the Pipeline Industries Guild. This year, the event had special significance as it paid tribute to the late Chris Bielby, a beloved colleague. The winner of the Lions' Lair competition was Kane International and they were presented the new Lions' Lair Shield named The Chris Bielby Shield in his honour.

In March, the Pipelines Maintenance Centre opened their doors to welcome in an enthusiastic group from IGEM. Attendees had the opportunity to learn about the future of hydrogen, the young engineer scheme and explore the workshop and facilities at PMC Hitchin.

The Section visited Aliaxis (GPS) in Huntingdon, where they got to see them demonstrate their latest innovations in PE technology including their new hydrogen polyethylene pipe and large bore access saddles.

Midlands Section

In Summer, the Section visited Armstrong Fluid Technology in Droitwich Spa. Attendees learnt about the company's operation,

products and commitment to sustainability and were invited on a tour of the facility.

During the AGM, there was a tour of the H2 test facility, which is used for the H21 project. Attendees got a firsthand look at the research and work being done to advance hydrogen and blended gas technologies.



The Section ended the year with a gathering at Gas Street Social where they celebrated the accomplishments of the year.

North East & Yorkshire Section

The North East and Yorkshire Section held events throughout the year including their annual Spring Charity Ball, raising funds for Help for Heroes.

Members had the opportunity to visit the DNV Flow Centre and the National Gas Compressor Station, where they gained insights into the specialist operations and capabilities of these facilities.

The Section also participated in the Dragon Boat Race on the River Tyne, competing against other teams to raise money

for the Teenage Cancer Trust. They achieved an impressive second place in the race.



A tour of Drax Power Station was organised, which included a presentation on bioenergy with carbon capture and storage (BECCS).

DNV also delivered a webinar to understand how to safely convert natural gas pipelines to hydrogen. With insight into the processes that must be followed for pipeline conversion to hydrogen and shared the standards that could be used and how they should be applied.

North West Section

Members were able to have insight into the training for IGEM/G/5 - Gas in Multi-occupancy buildings at the event 'Whose job is it?'. Attendees were able to look at some of the changes within the latest version of the standard, including responsibilities.

Members had the opportunity to explore the operations, products and services of National Gas

Services at an industry site tour at Knowsley. Discovering the tools and techniques used by industry leaders to support the gas grid of the future, engaging with industry experts and participating in demonstrations showcasing the technologies they utilise.

The Section ended the year with their annual Christmas lunch, welcoming guest speaker, Ian Holloway, and raising money for The Brain Charity.

technical presentation with an overview of the past year and their vision for the coming year.

The Sections annual golf day was held at the Royal Musselburgh Golf Club. The Section chose to support and raise funds for the My Name's Doddie Foundation to support people and their families suffering with Motor Neurone Disease.

who presented strategies and initiatives for utilising hydrogen.

The Section also arranged a visit to Hinkley Point C and learnt why producing low-carbon energy is necessary and how EDF is aiding Britain in reaching net zero through the construction of Hinkley Point C and the utilisation of other renewable sources such as wind and solar electricity. Due to overwhelming popularity, the Section organised a second visit later on in the year.



In Spring, the Section spent a morning at KIWA's newly commissioned hydrogen production site in Cheltenham. It began with an insightful presentation on how KIWA have developed the plant and why they are doing it, followed by a site tour of the SMR Unit and the test lab.

Scottish Section

YPPC finalist, Neil Mackay, presented his project, 'Innovative technical solution overcomes pigging access constraints to deploy pipeline isolation plug for valve replacement'. His presentation discussed how an innovative pipeline isolation plug prevents pipeline depressurisation offshore for valve replacement.

During their AGM, Steve Vick International delivered a

The Scottish Section also organised a webinar on Unconscious Bias, providing attendees with a deeper understanding of its impact on decision making, behaviour and relationships.

South West Section

An innovation showcase event was held in March, highlighting the tools, techniques and innovations that are shaping the future of the industry. They also focused on the transition to hydrogen, welcoming speakers

Welsh Section

Members were invited to learn about the subject of Human Factors and how it is being applied in the gas industry. Wales & West Utilities presented a webinar giving an overview of Human Factors as a discipline, how we need to apply the principles and the work we need to do in order to comply with UK legislation.

Held jointly with the South West Section, members clubbed together to raise funds for Bronwens Wish and

Trauma Recovery UK for the annual charity golf day which was held in Cottrell Park Golf Resort near Cardiff.

The Grand Hall Suite of The Coal Exchange in Cardiff hosted the Welsh Section's 57th Annual Dinner. The event featured comedian, Drew Taylor, and live entertainment from The Wild Sons. The event raised funds for Maggies, a charity supporting cancer patients and their families.

Young Persons Network

The YPN visited Grain LNG Terminal, which included two site tours. One tour went around the site and new construction works where they got the opportunity to see the internal structure of the tanks. The other tour visited the two jetties, then headed back to the main site following the pipeline corridor to the roof of one of the active tanks.

Cadent's Hydrogen Experience Centre also welcomed IGEM



to their facility dedicated to promoting the benefits of hydrogen energy. Attendees were provided with a deeper understanding of the potential of hydrogen as a clean and sustainable energy source and a tour of the facility.

Far East District Section

The Far East District Section strive to curate valuable experiences for IGEM members by fostering local and international connections, especially with the UK headquarters.



The Young Persons Network have set out some goals for the coming year:

- 1. Sustainable fuels:** explore hydrogen, biofuels, synthetic fuels, and more to help shape the future of the energy transition
- 2. Student engagement:** promote sustainable gas careers to schools and universities to encourage new talent to join our industry and IGEM
- 3. Enhance the YPN's profile:** Connect with peers and the wider gas community to drive engagement with all that we have to offer.

March was an exceptional month as they hosted IGEM's Past President Ben Clarke, and CEO Oliver Lancaster, in both Hong Kong and mainland China.

April involved an overseas delegation to Japan, aimed at enriching members understanding of the latest hydrogen developments, including visits to companies like Mitsubishi Heavy Industries Takasago Machinery Works and Kansai Airport Hydrogen Transport and Delivery Facility.

Throughout 2023, the Section's calendar was dotted with enriching events, from

a smooth AGM and Annual Dinner in June to technical visits in Foshan in August and a seminar by Mr. Naoki Mori from Kawasaki Heavy Industries in October. These efforts collectively mark a fruitful 2023 and welcome further presence from IGEM in the Far East in the future.

Equity, Diversity, and Inclusion

The IGEM Equity, Diversity, and Inclusion (EDI) Advisory Group have been actively working towards creating a more inclusive and equitable environment for all members.

To reflect our commitment to equity, the group changed its name from Equality, Diversity, and Inclusion to the Equity, Diversity, and Inclusion Advisory Group. This change emphasises our dedication to recognising and addressing the unique circumstances of each individual.

A dedicated EDI page on the IGEM website was launched to highlight our EDI activities. You will find a statement outlining our goals, as well as information about our partnerships, groups, and accreditations.



Over the last year we have been organising regular women in gas events to foster a strong network within IGEM. Our most recent events featured speakers from WUN, LoWEG, Cadent and SGN, covering a variety of subjects.



In response to the EDI survey, conducted in 2023, which received an overwhelming response, with nearly twice as many responses to the prior survey. We reviewed the feedback and evaluated the results and adjusted the goals accordingly, with a specific focus on addressing underrepresented groups, and areas that require improvement.

Supporting our commitment to education and awareness, we have organised webinars. Topics covered so far include Mental Health Awareness and Unconscious Bias. In November, a webinar exploring unconscious bias and its impact on decision making, behaviour, and relationships. These webinars are just the beginning of what we envision as a comprehensive library of resources to support our members.

We are proud to announce that IGEM is accredited as a Disability Confident Committed organisation. This accreditation demonstrates our commitment to taking positive action around disability, including improving our recruitment, retention

and development practices for disabled individuals. As part of this initiative, we provided a student with an opportunity to visit IGEM and shadow various departments.

Additionally, IGEM has been awarded accreditation as a Living Wage Employer. This accreditation, offered by the Living Wage Foundation, recognises employers who pay the Living Wage, reinforcing responsible pay practices.

The EDI Advisory Group has been diligently working on developing an IGEM Equity, Diversity, and Inclusion strategy that will outline our priorities for the next three years. This is currently being refined and will be implemented by March 2024, ensuring that we continue to drive positive change within our organisation.

“

We are immensely grateful to all the individuals who have generously dedicated their time to support a regional section and our unwavering commitment to Equity, Diversity, and Inclusion. We truly appreciate your invaluable contributions, as without you, none of this would be possible!

”

Andrew Musgrave

IGEM President 2023-2024

Keeping you in the loop

Phase One of the Digital Evolution and Engagement Project (DEEP) went live on the 11 January 2023 providing a much-improved digital platform for IGEM members and the secretariat through a fully integrated website and CRM solution.

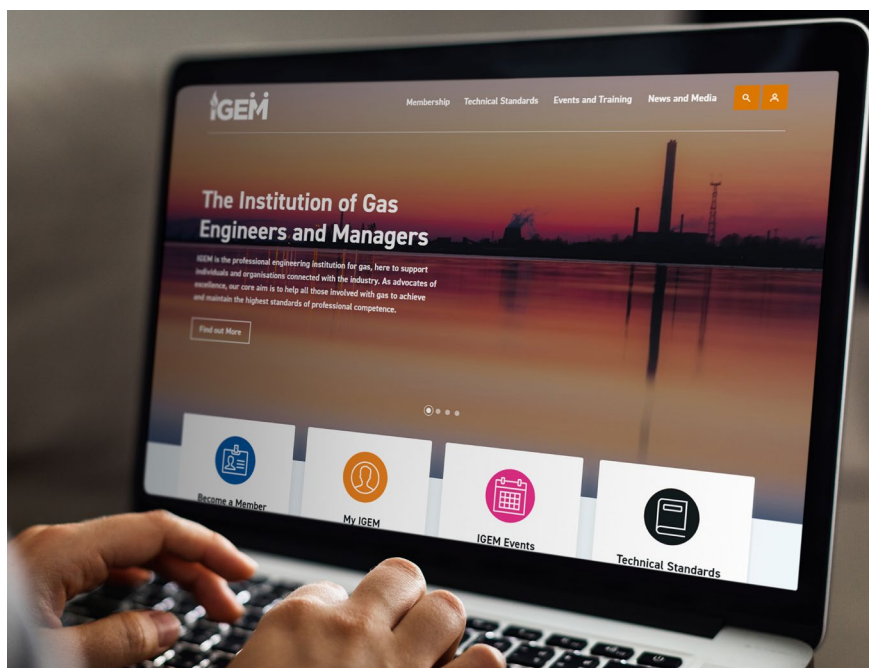
The feedback has been positive, and we've worked tirelessly to ensure the new site remains member centric and supports the wide range of users' needs from joining, and renewing membership to purchasing standards and booking events and training.

Throughout the year, our new digital platform has helped facilitate over 3,000 bookings for events and training, a 160% increase in the average monthly member signups, and a 21% increase in the average monthly unit sales of technical standards. Traffic has grown an average of 16% since launch, with around 18% of new visitors signing up for membership.

In July, the project was recognised in the Association Excellence Awards and shortlisted in the Best Association Digital Transformation category which the team took great pride in, and attended the final in November. Unfortunately we came away with no silverware; however, with a full year of results and experience, we know the new website and CRM system has transformed our operations.

We continued to develop the site experience using the out-of-the-box tools, and learn from user experience to further improve the platform throughout the year.

During the second half of 2023, we commenced Phase Two of the DEEP Project, which is due to conclude in Q1 2024. This will enable us to further improve and integrate the platform with the wider secretariat and take greater advantage of the abilities in the platform.



Gas International (Gi) and Gas Utilisation (Gu)

As we journey through 2024, it's a perfect opportunity to reflect on the dynamic year of our publications.

Historic integration with HGT

2023 was a landmark year for *Gi* as we welcomed the esteemed Historic Gas Times (HGT) into our fold. This integration, meticulously overseen by Joint Editors

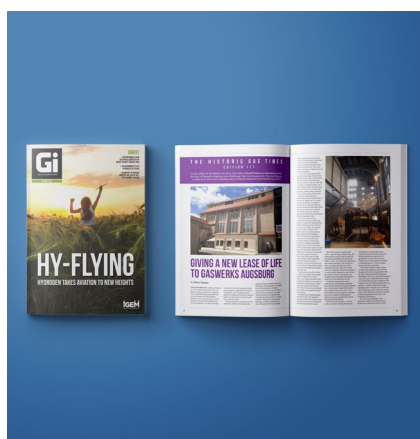
Professor Russell Thomas and John Horne, has enriched *Gi* with fascinating historical narratives and updates for gas industry enthusiasts.

Our HGT subscribers now enjoy the added benefit of receiving *Gi* editions, providing a broader spectrum of industry insights along with their cherished historical content.

Gas Utilisation: A success story

Gas Utilisation (*Gu*) continues to impress with its growing influence in the downstream gas sector.

This success is largely credited to Editor Jordanne Allsopp, whose dedication, supported by the invaluable contributions of the EngTech Working Group, has been instrumental in sourcing high-quality material.



We extend our heartfelt gratitude to the Working Group for their continuous support.



Themed editions and upcoming plans

Our themed editions were well received, and we're excited to announce more thematic explorations in 2024. Stay tuned for our upcoming media pack, which will detail what we have in store for our readers.

Digital supplement: Future of Gas special edition

Last year, we introduced a digital supplement focused on the future gas industry. This initiative aimed to broaden the reach of our content and was met with enthusiastic reception. We're thrilled to continue this in 2024 with a new theme, further extending our commitment to providing valuable industry insights.

As we forge ahead, our focus remains on delivering exceptional content that serves the interests and needs of our readers in the gas industry.



Thank you for your continued support and engagement with Gas International (*Gi*) and Gas Utilisation (*Gu*).

Social media

Our social media reach continues to grow with followers increasing across the various channels.

Although followers are increasing, some platforms are not providing the audiences for suitable interaction and engagement, and some have changed their strategic focus. With this in mind, we made the decision at the end of 2023 to no longer be active on X (formerly Twitter) and Instagram.

This has enabled us to focus our efforts on LinkedIn and Facebook, which are positioned better for our core audiences. Our presence on these platforms continues to receive increased engagement and we regularly monitor and adapt our post content accordingly.

As well as the IGEM Company Page and profile on LinkedIn, there is the IGEM Members Group. Throughout the year, this group has become more active with regular contributions from members.

The visuals to accompany our posts have been updated to help develop our brand look and feel, providing a cohesive identity for IGEM online.

All of these efforts have contributed to increase website referral traffic, which has supported such things as bookings for events, sales of technical standards, and new member applications.

If you don't already, following us on LinkedIn and Facebook will enable you to keep up to date with the latest from IGEM and the gas industry. As members, one of the ways you can help us to share those messages is to like, share and subscribe to IGEM's pages.

IGEM WEBSITE



76k+
visitors

+3%
engagement



+79%
time on page

515k
page views

SOCIAL MEDIA



17k+
followers
+30%



1.5k+
followers
+10%



245
subscribers
+11%

A look ahead

Having delivered such a successful hydrogen tour for the Climate Change Committee (CCC) in 2022, we've been invited to set up a similar tour for the National Energy System Operator in 2024. This will help develop relationships and raise awareness of natural gas, biomethane and hydrogen systems as they embark upon their transition from the Electricity System Operator.

Looking ahead to 2024, we plan to continue delivering areas of our ambition outlined in our new business plan, including adding hydrogen development capacity within the secretariat, supporting the development of funded roles for IGEM in further innovation projects, as well as helping with the continued growth of membership and adoption of our technical standards. This will in part be helped by our visits to our growing global reach, new members and Technical Standards customers in the Far East District Section, Australia and India.

Our innovation portfolio will continue across technical standards, skills and safety as we help to enable sector-critical hydrogen demonstrators and train and prepare our members for the energy system transformation. This enabling is critical to hydrogen trials and demonstrators to support policy decisions on the future of the gas grid and the role of hydrogen. This work is increasingly relevant internationally and is leading to opportunities for IGEM in new and emerging overseas markets.

Our involvement and engagement with industrial clusters will continue, including those hydrogen and industrial clusters not naturally allied with carbon capture and storage sequencing opportunities, such as East Midlands, Solent, Capital (London) and South Wales. These areas are seeking hydrogen supplies for distributed industry, large scale commercial uses and flexible power generation, with co-benefits then also available for energy demand from buildings.

We will keep making valuable contributions through opportunities to input into the work of the UK Government, UK Devolved Administrations and wider governments in countries and states where our members are based, to support the development of energy policy with science and engineering facts and evidence.

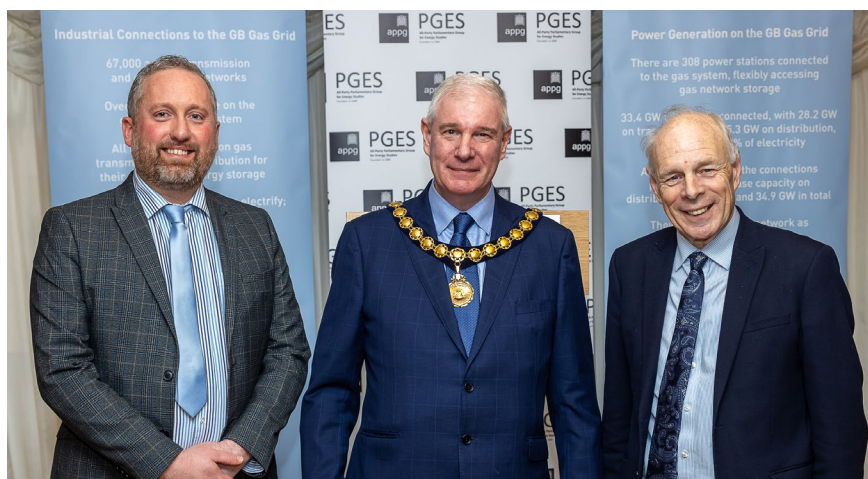


In the UK, for example, we still await the conclusion of a decision to mandate hydrogen-ready boilers, wait to see if the Boiler Upgrade Scheme will at some point include a grant incentive for hybrid heating systems, the firming up of hydrogen transport and storage business models and an improved appreciation of the scaled role biomethane can play for the medium and long term.

Our recent raising of awareness regarding the 67,000 industrial connections to the gas grid that we shared with stakeholders in December

will continue with further shock-and-awe graphics and statistics to help energy system reality sink in...and reduce the speed at which full electrification lobbying pedals attention away from common sense. We look forward to sharing this research in the House of Commons in January, and are grateful to networks for supporting IGEM with the collation of data.

Progress will be maintained with the Hydrogen Knowledge Centre, Housing Partner initiative and recruitment of installer members, all while we make the compelling case



for gas, and recruit, train and equip more members through collaboration between the downstream, midstream, upstream and supply chains, regulators, system operators, academia and wider still across the whole energy system and our electricity colleagues.

We will need to keep building and maintaining our relationships with key stakeholders, which includes helping raise awareness of the realities of the connections to, and services provided by, the gas grid today. We will also use our voice to amplify our members, including the decarbonisation work being delivered and to raise awareness of projects through technical visits to share developments and see the accelerating progress in action. We look forward to facilitating the dissemination of research to the Climate Change Committee regarding



our learning from past energy system transformations, and how it points to what needs consideration in the next system transformation. Our participation in the Hello Hydrogen campaign is set to continue as we seek to raise awareness of the opportunity for hydrogen as a future solution for public benefit.

Above all, IGEM is uniquely positioned and focussed on the entire gas industry's role in the transition to net zero, whilst continuing to articulate

the wide benefits and meet the engineering challenges of today's safe, robust and reliable natural gas system.

Our service to members and dedication to our sector will continue to provide a place to belong, serve and grow as we collectively deliver a clean energy system, develop and put into action a new equity, diversity and inclusion strategy, and journey our way together to end our emissions contribution to climate change.

Financial summary

IGEM had a successful financial year and exceeded budgeted expectations

35 Finance

Operationally, IGEM overachieved on budgeted expectations with total income of **£2,669,543**, which was 9% greater than the prior year, principally from the growth in charitable activities. Overall expenditure has grown by 2% to **£2,831,989**. This is due to an increase in operational spending and a decrease in spending from funds. The valuation of investment portfolios has increased by **£87,658**, after a **£524,352** loss in the previous year. The total net movement in funds is **£74,788**.

The total balance carried forward at the end of the year is **£4,941,306** of which **£1,081,716** is the Restricted Funds balance.

Consolidated Statement of Financial Activities for the year ended 31 December 2023

	2023				Prior year			
	Unrestricted Funds	Designated Funds	Restricted Funds	TOTAL	Unrestricted Funds	Designated Funds	Restricted Funds	TOTAL
Incoming Resources								
Charitable Activities	2,395,328	75,398	1,288	2,472,014	2,215,508	77,114	6,591	2,299,213
Trading Activities	90,032	-	-	90,032	57,651	-	-	57,651
Investment Income	68,895	1,022	37,580	107,497	58,490	872	31,551	90,913
Total Incoming Resources	2,554,255	76,420	38,868	2,669,543	2,331,649	77,986	38,142	2,447,777
Expenditure On:								
Raising Funds								
Investment Mgr Fees	4,816	-	2,633	7,449	5,098	-	2,751	7,849
Trading Expenditure	24,083	-	-	24,083	18,845	-	-	18,845
Charitable Activities	2,418,750	204,983	176,724	2,800,457	2,143,019	298,064	313,529	2,754,612
Total Resources Expended	2,447,649	204,983	179,357	2,831,989	2,166,962	298,064	316,280	2,781,306
Net gains/(losses) on Investments	56,917	(811)	31,552	87,658	(340,742)	-	(183,610)	(524,352)
Net (Expenditure) / Income	163,523	(129,374)	(108,937)	(74,788)	(176,055)	(220,078)	(461,748)	(857,881)
Transfer between Funds	194,067	(194,067)	-	-	148,327	(148,327)	-	-
Net Movement in Funds	357,590	(323,441)	(108,937)	(74,788)	(27,728)	(368,405)	(461,748)	(857,881)
Total Funds Brought Forward	2,116,619	1,708,822	1,190,653	5,016,094	2,144,347	2,077,227	1,652,401	5,873,975
TOTAL FUNDS CARRIED FORWARD	2,474,209	1,385,381	1,081,716	4,941,306	2,116,619	1,708,822	1,190,653	5,016,094

Consolidated Balance Sheet as at 31 December 2023

	2023	Prior year
Fixed Assets		
Tangible Investments	1,174,209	1,216,619
	3,849,601	3,752,180
	5,023,810	4,968,799
Current Assets		
Debtors	504,165	331,388
Short Term Investments	6,610	56,863
Cash at bank and in Hand	356,136	419,547
	866,911	807,798
Creditors	(949,415)	(760,503)
Net Current Assets	(82,504)	47,295
Total Assets less Current Liabilities	4,941,306	5,016,094
FUNDS		
Unrestricted	2,474,209	2,116,619
Restricted	1,081,716	1,190,653
Designated	1,385,381	1,708,822
	4,941,306	5,016,094

Council Statement on the summarised financial statements:

These summarised financial statements are based on information extracted from the statutory Council's report and consolidated financial statements approved by Council on 13 March 2024. They may not contain sufficient information to allow for a full understanding of the Institution's financial affairs. The full Consolidated Financial Statements, the Trustees Report and the Auditor's Report should also be consulted. Copies can be obtained from our website igem.org.uk or from the Finance Department by email to finance@igem.org.uk.

Institution of Gas Engineers & Managers

IGEM House
26 & 28 High Street
Kegworth
Derbyshire
DE74 2DA

+44 (0) 1509 678 150
general@igem.org.uk
www.igem.org.uk

Registered Charity 214011

