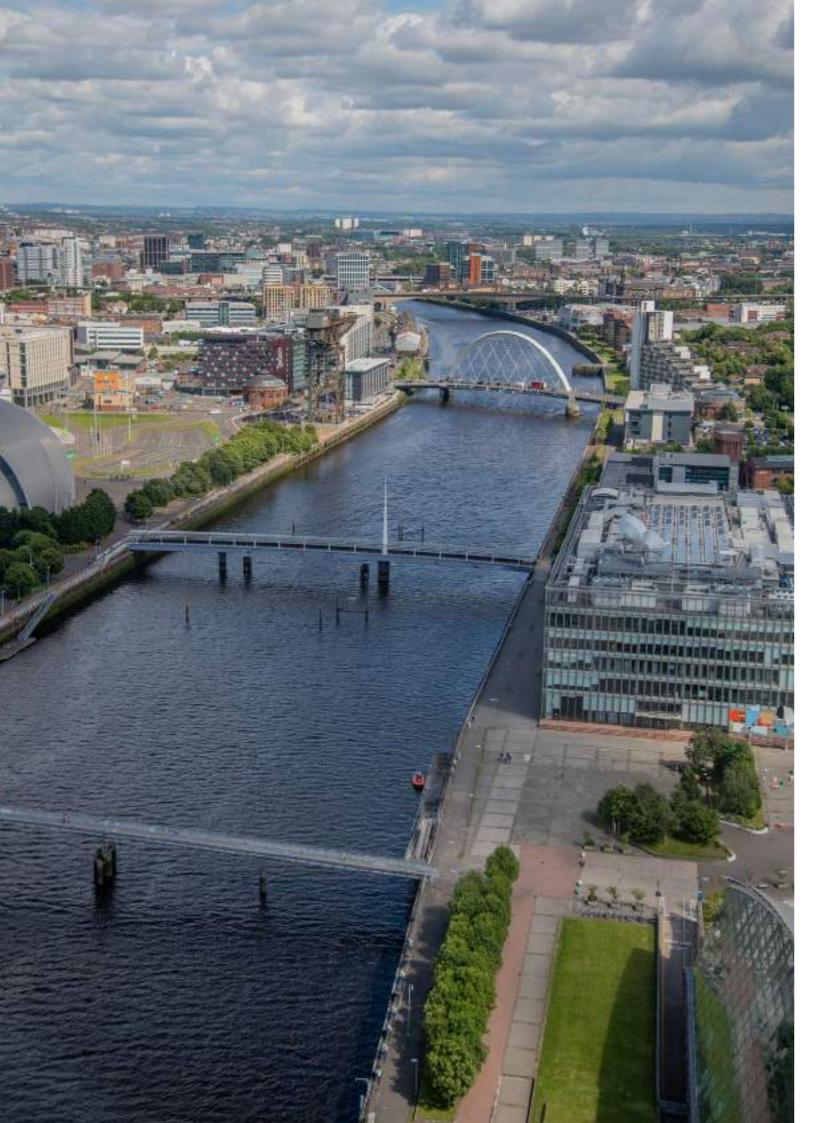
# Year in Review





GLASGOW/ SCIENCE CENTRE Registered Scottish Charity: SC030809



# A message from our **Chief** Executive

# Creating opportunities for lifelong learning

The past year has been one of change, growth, and success for all of us here at Glasgow Science Centre.

Amid what has been a challenging operational time for many third sector organisations, we welcomed our 6 millionth visitor in September a fantastic milestone for us as a leading attraction, and one that is testament to the hard work and dedication of our talented staff.

Over the last 12 months, we have made substantial progress in furthering our mission to inspire everyone to explore and understand the world around them and to discover and enjoy science. Our vision is simple; we believe that every young person - and adult - should have access to STEM learning opportunities that can enrich their lives, and we work tirelessly to create these opportunities.

Our curriculum-aligned STEM Learning Pathways, including our Learning Labs and STEM Futures programmes, are being delivered in schools across Scotland, we have maintained our position as an award-winning leading visitor attraction in Glasgow, and we have strengthened our strategic relationships with partners in industry and academia.

This year saw us partner with leading construction company Morrison Construction to offer free membership to the Science Centre for selected schools across Scotland showing what's possible when innovators and educators work together to create opportunities for STEM engagement.

We have also taken our strategic relationships with our partner universities to the next level with the signing of official Memorandums of Understanding – with University of Glasgow, University of the West of Scotland, University of Strathclyde, and Glasgow Caledonian University. In November, we took home the gold award for Climate Action at the Scottish Thistle National Awards Final, in recognition of the extensive range of measures we have taken to reduce our carbon emissions.

Now is an exciting time to be working in STEM in Scotland. From our world-leading renewables industries, to emerging technologies like Al and Photonics, the next few decades will bring entirely new career routes and specialisms that we can only imagine right now. As an educational charity, we play a vital role in bridging the gap between young people and employers to raise awareness of these crucial industries and cultivate the future STEM workforce.

Next year promises to be another busy year for Glasgow Science Centre as we prepare for our 25th anniversary, and for Scotland with the 2026 Scottish Parliamentary elections and Commonwealth Games. We'll be especially looking forward to launching our Photonics and Quantum Accelerator Pathway and refreshing our popular Powering the Future programmes. With the continued support of our valued partners in industry, academia, and business, we look forward to continuing to build upon our strong position within Scotland's STEM education community and create opportunities for people to meaningfully engage with science.



Dr. Stephen Breslin, Chief Executive, **Glasgow Science Centre** 

# **Key** Highlights

# **Memorandums of Understanding**

This year we formalised our strategic relationships with four of Scotland's universities with memorandums of understanding that will help strengthen partnerships within Scotland's STEM community and create learning opportunities for all.





## **Shetland Science Fair**

In November, our On Tour team took **Glasgow Science Centre's learning** programmes to the Shetland Science Fair, for the first time the fair has been held on the isles since 2009. Our involvement in the fair was the latest deliverable in a longstanding relationship between Shetland and the Science Centre.

# **Space-Comm Expo**

Last summer, Glasgow played host to Space-Comm Expo, the UK's largest space industry event. Our staff participated in the conference, and Stephen Breslin was invited to speak on a panel about Glasgow Science Centre's role in national skills development and education for a successful future space sector.





# **Success at Scottish Thistle Awards**

In September, Glasgow Science Centre was awarded the regional Best Visitor Attraction award and the Climate Action award. In November, we went on to win the national Climate Action award, in recognition of the demonstrable progress we've made on our journey to Net Zero.

### **Endodontics exhibit**

As a legacy to the 14<sup>th</sup> World Endodontic Congress held in Glasgow this year, we opened a new, state-of-the-art exhibit, 'At the Root of It', which teaches visitors about the anatomy of teeth, and the fundamental role of oral biofilms in oral disease and the treatment of endodontic disease. The exhibit was designed in collaboration with the British Endodontic Society and the University of Glasgow Dental School.



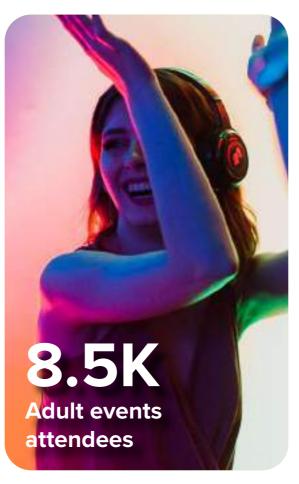
### 6 millionth visitor

This year we welcomed our 6 millionth visitor through the doors of Glasgow Science Centre. Since we opened in 2001, we've been creating innovative, hands-on opportunities for everyone to engage in science, at our historic Clydeside location.

# Our year in numbers



**227K** Public Science Mall visitors







13.5M

Social media

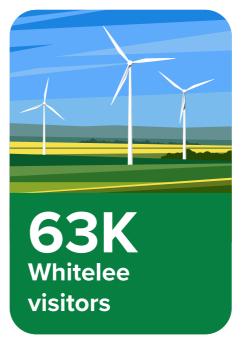
















# **STEM Learning** Pathways

We have a vision for a Scotland where STEM is for everyone, and where people are equipped with the skills and connections to make positive differences in their lives and to society.

To support this vision, our STEM Learning Pathway programme provides a series of experiences throughout a young person's life and beyond, using multiple touchpoints to immerse them in STEM education and link them directly with STEM industries.



# **In Primary School**

With funding from industry partners, we give Primary School children an immersive and accessible introduction to STEM subjects through interactive Learning Labs that spark their curiosity and introduce them to core and topical subjects.

The memorable programmes are anchored in the curriculum, and include hands-on activities, home learning, a visit to the Science Centre and the chance to meet an industry expert.



# **At Secondary School**

Building on their curiosity and skills developed through Learning Lab, Secondary pupils move on to engage with industry-aligned STEM Futures programme, designed in partnership with industry leaders to support sector needs.

Pupils get the opportunity to connect with and learn from industry professionals through a series of hands-on workshops and events that introduce the knowledge and skills required for careers and further learning.



# **Connections in community**

We know the significant role community can play in influencing our decisions and pathways, which is why we strive to create meaningful STEM engagement opportunities for community groups in Glasgow and further afield.

By empowering people in our communities to use science, we help to give underrepresented groups the opportunity and confidence to make valuable contributions to society and improve their lives.



# Our partners in public engagement

We value our relationships with university partners, and work with academics to bring their cuttingedge research in STEM to wider audiences through our innovative public engagement opportunities and 'Meet the Expert' series.

As experts in science communication, we support university students to deliver STEM engagement opportunities at Glasgow Science Centre, allowing the public to engage with leading science research in an accessible way.



384 schools have signed up to our STEM Learning Pathways, across every local authority in Scotland



# **Supporting industry**

With funding and technical expertise from our industry partners, our pathway programme helps to support the sector to address workforce shortages. It cultivates and nurtures a talent pipeline to support learners into STEM careers.

By working with Glasgow Science Centre, business and industry leaders can help ensure the longevity of the STEM workforce, and the continued growth and success of the scientific community.





# **Early interventions**

By reaching out to children at an early age, we provide memorable experiences that spark their curiosity and builds a positive relationship with STEM that will grow throughout their lives.

I have witnessed the success the children have had in their learning and the enjoyment it has given them.

Teacher, Glasgow



# **Space** Pathway

Scotland's space industry is taking off – and we've been working to make sure young people are prepared and empowered to capitalise on the new and emerging opportunities within the sector.

As a country, we already produce the largest number of satellites in Europe and, with the first SaxaVord Spaceport launch from Shetland imminent, Scotland is well on its way to becoming a leader in the world's space economy.

From space lawyers to system engineers, this rapidly expanding industry will require a diverse and skilled workforce to lead the way, as we continue to explore and discover more about the universe around us.

# **Creating opportunities**

With essential funding from the **UK Space Agency**, we were able to develop curriculum-aligned educational Learning Labs and STEM Futures Programmes that introduce primary and secondary pupils to space and Scotland's role within the industry.

Industry funding enables us to deliver equitable access to learning, regardless of location, socio-economic background etc. With the support of partners, we can make all of our learning resources free to access.

Our expert-led learning materials and resources also help to raise awareness of the wide range of roles within the sector, and lets pupils meet with experts in the field – including astronauts.

This year, we smashed our targets for engaging with primary schools and delivered programmes to **6,549 pupils** from **88 schools** across Scotland. Our 'On Tour' team even took our Learning Labs all the way to Shetland to deliver workshops to secondary schools there. With funding from the UK Space Agency ending this year we are actively seeking new partners to join MathWorks in helping us continue to deliver these very popular programmes.

**805** secondary school pupils have also taken part in our Space Junk workshop and Aerospace Engineering workshop, which includes a visit to the state-of-the-art Newton Flight Academy in the Science Centre.





Working with
Glasgow Science
Centre allowed
SaxaVord to
showcase the
breadth of space
careers available
to students in
Scotland.

### **Bryden Priest,**

SaxaVord Spaceport



The Space
Learning Pathway
is a quality project
and excellent
match with
our objectives,
which include
highlighting
diverse career
role models to
students along
with the pathways
into space sector
careers.

### Phil Weaver,

Education and Future Workforce Lead UK Space Agency



### Out of this world education

Created with input from our academic and industry partners, our **Space Learning Labs** contain themed exercises, lesson plans, video content and interactions with experts.

In **Space Discovery**, pupils in P2 to P4 get their teeth into the basics of the solar system and space exploration.

P5 to P7 learners get to go **Out of this World** and take part in interactive activities that explore Scotland's growing space industry; investigating the new emerging technologies and discovering how humans could live in space.

And **Scotland in Space** supports young people in S1 and S2 to investigate the science behind rocket and satellite technology, applications of satellite data, and recognise the opportunities available in Scotland's growing space industry.



This year we delivered **125,000 hours** of space-themed learning



# **Energy** Pathway

When it comes to green energy, Scotland punches well above its weight. As a country, we are entirely selfsufficient in renewables, which is largely down to the abundance of energy-rich natural resources around us - from off-shore wind power to solar energy and tidal technologies.

Over recent years, our renewables sector has gone from strength to strength and, as the challenges presented by the global climate crisis increase, these industries will only continue to grow.

Scotland is ideally placed geographically to become a global powerhouse in renewable technologies, but as innovators in education, it's our role to raise awareness of this vital industry and support its evolving workforce.

# Leaders in industry

With the welcome support of **OPITO**, this year we delivered 115,298 hours of energy-themed learning to pupils right across Scotland and the north of England alongside our delivery partners in Aberdeen, Dundee, Newcastle and across the Highlands. This valued funding enables us to create learning resources that teach young people about the role of renewables, and the vast opportunities within the sector.

Working with leaders in industry allows us to create resources that identify and support industry needs, while engaging pupils in the very latest developments and cutting-edge technologies in renewable energy.

In delivering our energy programmes, we've worked with **81 schools** from local authorities across Scotland, including the Western Isles and the Scottish Borders.





The Learning Lab's curriculum linked content enhances science education while sparking interest in energy related careers. equipping the next generation with the knowledge and skills needed for the industry's future.

### **Faye Sherriffs**,

**SVP Strategic** Partnerships, **OPITO** 



# **Innovative programmes**

Our Powering the Future Learning Labs support outcomes across Sciences, Social Studies and Technologies.

Using unique, hands-on activities, the programme allows pupils in P5 to P7, and in S1 and S2, the opportunity to investigate renewables technologies and the pathway to net zero. Learners will discover opportunities in the energy sector and explore how their skills could change the world.

Pupils get the chance to explore key concepts like carbon capture – a crucial component of the future of renewables – and learn about how electricity is generated through the mechanisms of a wind turbine.



**5,970** children have taken part in **Powering the Future Learning Labs** 



# Life Sciences Pathway

From the discovery of penicillin to the first successful IVF procedure, developments in life sciences have shaped human history and help us develop ways to learn more about our bodies and improve our health.

Now faced with an aging and growing global population, leaders in life sciences play a crucial role in creating innovative solutions for existing and new healthcare problems.

Our Life Sciences pathway lets pupils get up close with the human body, giving them the chance to "look under the bonnet" and discover what goes on inside.

### **Leaders in industry**

We've partnered with industry leaders in healthcare Merck and **GSK** to deliver interactive learning programmes that get pupils thinking about their own bodies and learning about the science behind health and wellbeing. These tailored resources support learning outcomes for the Scottish Curriculum for Excellence.

The course material also supports second level experiences and outcomes in Biological Systems and Health & Wellbeing.

Merck, GSK and Living Lab's valued funding has allowed us to welcome 4,216 pupils from 84 schools into Glasgow Science Centre to learn about their own anatomy.





Beyond inspiring future talent, this partnership enriches the local community and highlights the incredible work being done in Life Sciences across Scotland. By showcasing the innovation and expertise within the sector, we're fostering curiosity, sparking creativity, and reinforcing Scotland's position as a hub for scientific excellence.

### Judith Clarke,

**Head of Global** Manufacturers and Viral Clearance Operations, UK site head Merck



# **Bodyworks Learning Lab**

This year we delivered 40,194 hours of engagement for

Developed with input from educators, along with supporting teachers with curriculum-aligned resources, pupils had the opportunity to watch a lung dissection, and get an introduction to precision medicine.

Our On Tour Team visited 106 schools and met with **11,286 pupils** 





our Bodyworks Learning Lab, where pupils were able to explore different body systems, over an eight-week learning programme.

# Meaningful engagement

As experts in science communication, our public engagement opportunities are a core component of what we offer at Glasgow Science Centre and enable us to build strong strategic relationships with our university and industry partners, while empowering public audiences to engage with science in a meaningful way that enriches their lives.

Our experienced teams support STEM professionals to bring their findings to wider audiences and involve the public in cutting-edge science and innovation – from our acclaimed David Elder Lecture series, to our popular Curious About Live Sessions.

# A week of learning

British Science Week is a highlight of our calendar, and this year we brought experts from a wide variety of organisations together for seven days of STEM activities and learning, including a forensic look at precision medicine and an interactive introduction to deep-sea robots.

Over the week, we worked with ambassadors from Marine Conservation Society, The Weir Group, DRAX, Institution of Civil Engineers, MathWorks, National Physical Laboratory, Scottish Association for Marine Science and **University of Glasgow** – bringing the latest developments in science and engineering to new audiences, and delivering 157 engagement hours.

# Cleaning the air

We worked with researchers at University of Strathclyde to bring findings from their **GEMINOA** project to the community through a series of public engagement opportunities including an interactive family event.

Funded by ICLEI, the GEMINOA project investigates the complex science of outdoor and indoor air quality, with the aim of engaging residents in Glasgow in its research. To support this, our public engagement team translated high-level concepts into innovative experiences and activities that made research into Glasgow's air quality understandable and accessible, and delivered 630 public engagement hours.



exciting place to be, bringing your work into that environment and having the assistance of the Science Centre to get your message across.

# Craig Michie,

**Lead Researcher** University of Strathclyde





Working in partnership with **Glasgow Science Centre means** Drax have fantastic opportunities to engage with children from across Scotland who are interested in finding out more about STEM subjects and careers. It was such a pleasure to see first-hand the enthusiasm from visitors to learn more about Hydro power during British Science Week.

### Sarah Cameron

Community Manager (Scotland)



















# **Our** Community

Our Community Learning and Development team play a crucial role in our pathways programme – helping to create key opportunities for science engagement within our local community and integrating STEM learning into the wider Glasgow society.

Our experienced learning coordinators work with a wide variety of learners, including young people and families from areas of high multiple deprivation, people with disabilities or additional support needs, learners from Black and Minority Ethnic groups and people for whom English is not their first language, the elderly, men's groups and women's groups, and young carers.

# **Reaching accreditation**

This year, our popular **Adding Value** maths course, funded through **UK Government Multiply** funding, achieved Level 3 accreditation from the Scottish Credit and Qualifications Framework.

Learners have been participating in the eight-week adult maths course, which supports them to improve maths skills that are useful in everyday life and employment, helping learners to overcome anxieties they may have around maths and increasing their confidence.

**89** participants this year have attended at least one session, and since the course gained accreditation, **48** learners have been awarded with the qualification.

In this financial year we've had cohorts from **Not Alone Empowerment Centre, Glasgow Afghan United, City of Glasgow College** and **AMINA – The Muslim Women's Resource Centre.** 

# **Family learning**

Our **GALLANT** family learning programme continued for a second year and concluded with a free evening celebration event for community members who





# Making noise in the community

We attended a range of community festivals this year including Children's Wood Harvest Event, the Springburn Festival, Govan Fair and the African Challenge Family Fun Day.







"I think it's a fantastic experience. I can make new friends and improve my knowledge."

Adding Value participant



# It takes a village

This year, we worked with partners including:

- · Developing the Young Workforce
- African Challenge
- AMINA Muslim Women's Resource Centre
- Meet Me In Govan
- Differabled
- Barlinnie Prison
- Clyde College ASN learners
- City of Glasgow College ESOL learners
- Men's Shed



We delivered **251 community learning sessions** 

5,901 participants
have engaged in
our community
learning projects
this year

# Creative partners

Our Experience Design Service team are experienced project managers, designers and educators who are passionate about designing robust and interactive experiences and providing meaningful and compelling engagement.

The team are experts in working with partners to distil and present complex information in an accessible and engaging way for any project. The income generated from external projects is fed directly back into the Science Centre to enhance the offer to our visitors and increase the impact and reach of our educational programmes.

# **BAE Systems**

We were commissioned by **BAE Systems** to develop and design an Exhibition and Heritage space and a STEM Innovation Lab, exploring the innovations of naval shipbuilding for the new Applied Shipbuilding Academy, located at their Scotstoun site.

Open to BAE Systems' apprentices and invited groups, the centrepiece interactive exhibit - a model Type 26 Frigate ship featuring two information touchscreens, and cutting-edge AV technology - aims to inspire the next generation of shipbuilders, and seeks to engage school groups, community audiences and academy apprentices. The exhibition also includes an 8-metre-long lightbox showcasing the process of building a ship and the innovations of past and present that enable shipbuilders to become history makers.

### **ETZ Ltd**

Our Experience Design Service team worked in partnership with exhibit fabricators Unusual Projects to develop and design a touring exhibition for the North East of Scotland onboard a hybrid vehicle, the 'Net Zero Challenge'.

Commissioned by ETZ Ltd, the vehicle will visit over 30 schools to engage 25,000 pupils across the region in renewable energy systems and raise awareness of lowcarbon energy industries and the vast range of career opportunities available.

The vehicle, which expands into an exhibition space, includes 3D geographical maps, touch screens and interactive exhibits that encourage pupils to think about energy security, sustainability, affordability and community impact.

Our Experience Design Service has been working to deliver five unique projects this year.





We've worked with highprofile clients including **BAE Systems**, **ETZ Ltd** and Moray Council.







We are absolutely delighted with the output of our collaboration on a STEM Innovation Lab within our new Applied Shipbuilding Academy. The Glasgow Science Centre team did an amazing job at interpreting our brief and applying their creativity and design skills to turn it into a far more impressive space than what we had imagined was possible. The quality of materials, finish and installation was also second to none, and we have had nothing but brilliant feedback on the finished product.



Scott Affleck.

L&D Lead - Applied Shipbuilding Academy, BAE Systems

# Thanks to our partners

































AAC Clyde Space **BAE Systems** 

Bloomberg

Boeing

British Endodontic Society **Bumblebee Conservation Trust** 

Clyde River Foundation

East Renfrewshire Council

Education Scotland

**EPSRC** 

European Institute of Innovation & Technology

Farrans

Fraunhofer UK

GE Caledonian

Glasgow Caledonian University Glasgow City of Science and

Innovation

GSK

Heriot Watt University

Historic Environment Scotland Imperial College London

Institution of Civil Engineers

JMB Trust

JP Morgan

Marine Conservation Society

Mathworks

Merck

Morrison Construction

NHS Scotland

National Physical Laboratory

Primary Science Teaching Trust Royal Academy of Engineering

RZSS Highland Wildlife Park

Scottish Association for Marine

Scottish Environment Protection

Agency

Scottish Space School

ScottishPower Energy Networks

ScottishPower

ScottishPower Renewables

Scottish Water

Space Scotland

SSEN Transmission

Thales

The Association of Science and **Discovery Centres** 

University of Dundee

University of Edinburgh

University of St Andrews

University of Stirling

University of the West of Scotland









If you share our charity vision and ambition to make STEM accessible to all, we would like to work with you. Please get in touch.



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