



scitech

Scitech Strategy 2030



Our Purpose

To inspire engagement by all Western Australians in science, technology, engineering and mathematics

Our Values

These are the behaviours we value, encourage, uphold and promote across Scitech.

They describe how we should interact with each other, our customers, partners and stakeholders.

We recognise and reward those that exemplify them.

We lead by example and encourage others to uphold the values of our organisation.

Passion

We are passionate about Scitech and our purpose. This passion is the energy that inspires our excellence.

Respect

We are honest, respectful and look out for each other's well-being. We foster a supportive community by being open-minded and welcoming of people of all ages, genders, abilities and cultural backgrounds.

Innovation

We encourage innovation and creativity. We learn and grow by working together.

Fun

We share the fun we have at work by including each other and the community, engaging our own curiosity and encouraging it in others.

Sustainability

We minimise our environmental footprint, responsibly using our resources and energy.

We get it right when people are creatively and respectfully working towards Scitech's purpose.

People feel safe and supported, curious and confident, and enjoy the work they do.

Message from our CEO and Chairperson

STEM is everywhere. We all benefit from it. It pervades every part of our lives. Even those of us who call ourselves STEM professionals often take it for granted. It is behind the food that we eat, the way we communicate, our transportation and our modern lifestyles.

STEM stands for science, technology, engineering and mathematics, but is so much more than a collection of study areas or professional disciplines. It is an approach to problem solving, critical analysis and innovation. Engaging in STEM fosters teamwork, independent thinking, initiative and communication.

Humans have been engaging with STEM since the first stone tools were developed in the Olduvai Gorge in Tanzania, almost two million years ago. At around 1800 BCE, the Babylonians, Greeks, Indians and Chinese were independently exploring advanced mathematical concepts, astronomy and natural sciences.

Closer to home, Indigenous Australians, the world's oldest living culture, were leading the way with their own scientific discovery skills.

The boomerang, probably the most famous example of Indigenous Australian technology, is just one example of how the pursuits of these first engineers, chemists and astronomers has contributed to science, technology, engineering and maths, helping to shape the future scientists of today.

The scientific revolution in the 16th and 17th centuries redefined our engagement with STEM and drove an explosion of benefits for humankind. Global average life expectancy has doubled in the last 100 years. We are more prosperous. Our homes are more comfortable. We have become a global community through advances in transport and the ability to connect digitally to anyone, anywhere and at any time.

As the world rapidly transforms so much of how we live and what we do, so too are the skills that our students need to thrive in future workplaces. STEM skills and STEM learning are now more than ever essential to today's children and teens, who are likely to take up careers that do not even exist yet. It is estimated that 75% of future jobs will require STEM skills and 90% will require digital skills, so empowering our next generation with the skills to prepare them for future jobs and future opportunities is essential for innovation and success.

Globally, our society is on the cusp of the next great technological revolution, marked by a mix of technologies that will blur the lines between physical and digital worlds. Developments such as artificial intelligence, biotechnology, quantum computing and the transition to renewable energy mean that we will continue to see an increase in demand for STEM skills which is key to developing a skilled society that can adapt and respond in the future.

Some of these technological developments will raise ethical questions – just because we can do something, should we? Navigating these challenges will not only require STEM professionals, but a society with greater STEM literacy. STEM awareness is vitally important, now more than ever.

Scitech's purpose is to inspire engagement by all Western Australians in science, technology, engineering and mathematics, and for almost 35 years we have done just that, offering engaging and inspiring experiences that heighten awareness, drive deeper engagement and create emotional connections with STEM.

Whether you are a toddler or an octogenarian, a STEM professional, a closet science nerd, or someone who has never thought about STEM, there is something for you at Scitech.

The Scitech Discovery Centre is full of hands-on exhibits that promote learning through play. Our stage shows and planetarium experiences leave people in wonder, with a thirst to share their new-found knowledge and a desire to know more. Our Statewide Team travels thousands of kilometres each year, to connect with and share their passion for STEM with hundreds of thousands of Western Australians at regional and remote schools and community events. And our educational resources and professional learning programs support teachers with the further skills and knowledge that spark curiosity and interest, future-proofing students for a changing contemporary world.

The Scitech Strategy 2030 sets out our longer-term vision on how we will support Western Australians with STEM capabilities. It will guide us so we can continue to encourage more children and young adults to study STEM subjects to develop the skills they need for tomorrow's jobs, and it will enable us to increase STEM literacy, to engage and develop the broader community towards economic prosperity and sustainability.



Dr John Chappell
CEO



Chris Palandri
Chairperson

Globally, our society is on the cusp of the next great technological revolution, marked by a mix of technologies that will blur the lines between physical and digital worlds.

Our purpose is to inspire engagement by all Western Australians in science, technology, engineering and mathematics.

Why do we do this?

An increase in STEM literacy benefits society. History has shown us that as science progresses, it leads to applications that can raise issues and debates.

The importance of STEM culture, awareness and literacy is not just for the STEM skills pipeline, but to support informed decisions and community sentiment around contemporary issues. A society with higher STEM literacy should make better informed judgements and decisions.

Encouraging greater awareness of STEM and digital technologies in society and encouraging children to take up STEM careers will safeguard our future and deliver economic, environmental and social benefits to all Western Australians.

STEM is central to our future. With the rise of new technologies in biomedicine, microfabrication, robotics and artificial intelligence, the ability to understand and apply data, and develop solutions to complex problems, will be essential life skills.

Many of the children who interact with Scitech programs today, will enter a workforce that includes jobs that do not yet exist.

By helping more people to be inspired by and engage with STEM, we will not only help to attract a broader range of people for new jobs, but we will also bring more diversity to the people who contribute and engage with STEM and innovation, which will create a fairer and more inclusive society.

Our strategy will deliver four key outcomes:

- 1.** Inspired and engaged Western Australians
- 2.** More confident and capable teachers and students
- 3.** Parents engaging in STEM discussions at home
- 4.** A more informed public.

We will achieve this by honing our core skills, developing new and enhanced capabilities, and furthering our reach with physical and digital experiences, that build on our legacy while aligning with our stakeholder priorities.



Strategic Priorities

Drivers



Inspire & Engage

People learn best when they are engaged. Scitech will leverage curiosity, wonder, excitement, play and interaction with our audiences in STEM.



Develop & Nurture

Support the development of STEM skills through high impact experiences, nurturing an interest in STEM, and working closely with teachers.



Connect & Collaborate

The most effective way to engage all Western Australians in STEM is to partner and collaborate with other organisations and community groups that have a shared purpose and complimentary capabilities.

Enablers



People & Environment

Engaging the public with STEM requires dedicated teams of qualified, passionate and highly motivated people. Scitech will provide workplace environment, culture and opportunities that will attract and retain the best talent.



Building our Future

To maintain our existing capabilities, Scitech will increase its revenue from a range of sources. We will also invest in new capabilities to ensure that are able to fulfill our ambitious purpose.

Strategic Driver

Inspire & Engage



Strategic Initiatives

People learn best when they are engaged. Scitech will leverage curiosity, wonder, excitement, play and interaction with our audiences in STEM.

Scitech will invest in and develop our products, both physical and digital, to improve our reach and enhance our offerings and experiences in Perth and the regions. A special focus will be given to the hardest to reach audiences such as disadvantaged people and those in regional and remote locations.

We will inform on the importance of STEM in advancing and enabling society.

1. Take STEM to our audiences through playful, interactive and engaging experiences. Provide digital resources that encourage the Scitech experience between visits.
2. Increase our positive impact on key audience segments, in particular women and girls, Indigenous people, regional and remote Western Australia and people in lower socio-economic areas.
3. Drive positive attitudes, informed decisions and demonstrate the importance of STEM in solving real-world problems.



Strategic Driver

Develop and Nurture



Strategic Initiatives

Support the development of STEM skills through high impact experiences, nurturing an interest in STEM, and working closely with teachers.

STEM skills are transferrable and beneficial for everyone. Scitech will continue to develop and offer quality experiences that target important STEM skills.

While Scitech focuses on providing children with engaging experiences, we also recognise the benefit in helping to equip teachers, who see students everyday, to more confidently engage, inspire and teach STEM, via professional learning opportunities and digital resources.

1. Nurture STEM interest and develop higher level STEM skills through programs targeted at those with an interest and passion for STEM.
2. Increase teacher confidence and capability in teaching STEM skills through practices, resources and networks.
3. Facilitate parent and carer engagement to improve children's STEM outcomes by encouraging conversations about STEM and STEM careers.



Strategic Driver

Connect and Collaborate



Strategic Initiatives

The most effective way to engage all Western Australians in STEM is to partner and collaborate with other organisations and community groups that have a shared purpose and complimentary capabilities. Our purpose is too big to deliver on our own, the task is simply too large.

Scitech will:

1. Engage with science centre networks, organisations and community groups with a shared purpose, and industry, to leverage efforts and maximise impact.
2. Be the 'go to' organisation for advice on STEM engagement, the role of curiosity and hands-on interaction in childhood development.
3. Maintain and grow partnerships to inspire participation in STEM.
4. Advocate for STEM and informal learning in STEM policy.



Strategic Enabler

People and Environment



Strategic Initiatives

Engaging the public with STEM requires dedicated teams of qualified, passionate and highly motivated people. Scitech will provide a workplace environment, culture and opportunities that will attract and retain the best talent.

The issues facing society and the environment have their solutions in STEM. Scitech needs to show leadership by ensuring that we conduct our own operations in the most environmentally sustainable way and demonstrate this to the community.

1. Be a brand that staff are proud to work for and a supportive and inclusive workplace where staff feel recognised, involved and able to contribute.
2. Ensure a strong health and safety culture, both physical and psychological.
3. Reduce our environmental footprint.



Strategic Enabler

Building our Future



Strategic Initiatives

Scitech is a not-for-profit organisation and a registered Australian charity. Without support from the Western Australia Government, partners and the public, Scitech could not exist. To maintain all of our existing capabilities, Scitech will need to increase its revenue, from a range of sources, to meet rising costs and fulfill an ambitious purpose.

The Scitech Discovery Centre is a core part of our purpose. However, the centre is aging, lacks amenity, has become too small and requires upgrading. We aspire to identify and secure funding for a new centre. However, even under the most optimistic of scenarios, a new centre will not be ready for seven to ten years. Therefore, we will work to also secure funding for revitalisation of the existing Scitech Discovery Centre.

1. Drive new revenue and funding sources, including partnerships, commercial services, grants and philanthropy.
2. Improve systems and processes to deliver efficiencies and financial sustainability.
3. Maintain and grow our brand, value and organisational positioning.
4. Develop an accessible, innovative, iconic new science centre that is valued by all Western Australians and is respected internationally.
5. Revitalise the existing Scitech Discovery Centre to offer dynamic and immersive experiences that support the uptake of STEM and evolve with the community's changing needs, values and expectations.



Measuring our Success

Drivers



Inspire & Engage

We will demonstrate that interaction with Scitech leads to a more positive attitude to STEM and a better understanding of how STEM solves real-world problems.

We will measure satisfaction with and participation in Scitech's activities, especially by women and girls, traditional owners, people from culturally and linguistically diverse backgrounds and lower socio-economic areas.



Develop & Nurture

We will demonstrate changes in STEM skills (children), a positive shift in STEM engagement (parents), and increased capability and confidence to teach STEM (teachers).



Connect & Collaborate

We will demonstrate improved collaboration using net promoter score.

We will participate in and lead policy and public debate related to STEM engagement.

Enablers



People & Environment

We will demonstrate:

- Significant improvement in staff satisfaction and morale.
- Year-on-year improvement in safety performance.

By 2030 Scitech will be carbon neutral.



Building our Future

Success will be demonstrated by:

- Our ability to re-invest back into program extensions.
- More diversified and increased funding to support new capabilities.

Before 2025 we will have completed the revitalisation of the Discovery Science Centre at City West.

We will aspire to welcome visitors to our new Science Centre by 2030.

Aligning with stakeholder priorities

Scitech has a broad range of stakeholders including the Government of Western Australia, the Commonwealth Government, our industry partners, other organisations and community groups that promote STEM and the arts, schools and teachers, and of course, the general public. We listen to our stakeholders, and as much as possible, have tried to include their feedback in this strategy.

The Scitech strategy aligns with:

- Government of Western Australia Department of Jobs, Tourism, Science and Innovation.
- Government of Western Australia Department of Education.
- Future jobs, future skills: Driving STEM skills in Western Australia. Government of Western Australia Department of Jobs, Tourism, Innovation and Science.
- National STEM School Education Strategy 2016-2026, Australian Government Department of Education, Skills and Employment.
- Diversify WA Economic Development Framework (www.wa.gov.au).
- The United Nations Sustainable Development Goals (SDGs) – through the impact we create, Scitech directly contributes to SDG 3 (good health and wellbeing), SDG 4 (quality education), SDG 5 (gender equity), SDG 8 (decent work and economic growth), and SDG 9 (industry, innovation and infrastructure).

Implementing the strategy

We are a strategy-led organisation. The high-level directions and objectives set out in this document cascade into detailed implementation plans and form the basis for our investment decisions. The strategy articulates the long-term vision for how Scitech will fulfill its purpose.

The strategy links directly to the Scitech five year business plan, detailed business unit plans, key performance indicators and annual performance appraisals for our people. The strategy is reviewed every three years to ensure it is up to date and relevant. Progress toward targets and KPIs are reported yearly in our annual report.



scitech.org.au



Government of **Western Australia**
Department of **Jobs, Tourism, Science and Innovation**

Scitech is proudly supported by the Western Australian Government through the Department of Jobs, Tourism, Science and Innovation.