





# **Bright Future STEM Program** Invitation to your school

## WHO ARE WE?

The Bright Future STEM Program is facilitated by Australian Resources and Energy Employer Association (AREEA), the peak employer group for the resources and energy industry.

AREEA's membership spans the entire resources and energy industry supply chain, including exploration, construction, commercial blasting, mining, hydrocarbons, maritime, smelting and refining, transport and energy, as well gas suppliers to these sectors.

AREEA members across the resources and energy industry are responsible for a significant level of Australian employment, with an estimated 10% of our national workforce, or 1.1 million Australians, employed directly and indirectly, because of the resources sector.





#### WHAT IS THE BRIGHT FUTURE STEM PROGRAM?

To meet overwhelming industry and employer demand, AREEA launched a national, school-based Bright Future STEM program in 2019.

The program engages children in Years 5-6 in Science, Technology, Engineering and Maths (STEM), raising awareness of the diverse range of highly rewarding, technologically advanced jobs available from choosing to study STEM subjects.

Since its inception, the program has reached more than 8,000 students nationally through visits to major cities and regions around Australia.

Through insights to the diverse and rewarding future STEM employment opportunities in the Australian resources and energy industry, students are inspired and encouraged to pursue an interest in STEM careers.

Bright Future STEM is the first program of its kind tailored to primary school students, highlighting female STEM professionals, and linking the industry with educators and community groups.









### WHY IS THIS IMPORTANT?

Research shows that STEM is too often focused on high school students – a point at which it may be too late as they have already made decisions about the subjects they enjoy.

In particular, the program aims to engage more girls in STEM pathways through the opportunity to meet and hear from female STEM professionals, attracting more girls into traditionally maledominated industries, such as resources and energy.

The Bright Future STEM activity coaching team comprises of industry STEM professionals, PhD students and energy and resource sector experts who are all passionate about delivering STEM experiences that create a lasting spark for children to pursue STEM studies and career pathways.

The program is delivered in partnership with the Australian Gender Equality Council (AGEC) and participating industry partners.







# **HOW BRIGHT FUTURE STEM WORKS?**

Hosted by AREEA in participating schools, each program event will involve several ageappropriate, hands-on, educational activities to create excitement and wonder about STEM in the resources and energy industry.

This includes enhanced and virtual reality, robotics, coding and engineering challenges, and many other stimulating activities.

The activities are complemented by inspiring industry role models (predominantly female) who speak to students about their STEM career journey and why they are passionate about working in resources and energy.

Female role models are a vital part of the program to ignite a passion for STEM in girls, empowering them to pursue STEM studies and take advantage of the many opportunities for jobs of the future.

Role models are sourced from local resources and energy industry companies and include STEM professionals such as Geologists, Engineers, and relevant trade professionals.

Our website - www.brightfuturestem.com.au contains dedicated areas for both teachers and parents with helpful resources, information, and tips for sustaining interest in STEM subjects in the classroom and at home.

#### ATTENDING BRIGHT FUTURE STEM ACTIVITY TEAM

The Bright Future STEM Program team coordinates, facilitates and attends all events. AREEA members also provide members of their team to assist in supervising the range of activities during the sessions. All we ask is for some of your teaching staff be available to assist us too.

There is nothing else you need to do!









### **SESSIONS**

The program runs for 2 hours, below is an example agenda. We will vary some timings depending on the role models and the number of students participating and a finalised agenda will be agreed upon prior. We will work to times that suit your school day and to cover as many students as possible.

Session time	8:00 am – 9:00 am	AREEA TEAM SET UP
Years 5 & 6 Total = 90 6 x groups of 15	9:00 am - 9:05 am (5min)	Welcome to Bright Future STEM
	9:05 am - 9:15 am (10min)	Role Model Talk 1
	9:15 am - 9:20 am (5 min)	Role Model 1 Q&A
	9:20 am - 9:30 am (10min)	Role Model Talk 2
	9:30 am - 9:35 am (5 min)	Role Model 2 Q&A
	9:35 am - 9:40 am (5min)	Welcome to the Activities
	9:40 am - 10:55 am (1hr 15min)	Rotate through 6 activities
	10.55 am - 11:00 am (5min)	Thank you
	11:00 am – 11:45 am (45 mins)	Pack down

# CONTACT DETAILS - brightfuture@areea.com.au

We look forward to working with you and bringing the Bright Future STEM Program to your school.

Yours sincerely,

# The Bright Future STEM Program Team





