

CASE STUDY: GREEN GRID CHALLENGE

OBJECTIVE

As part of the annual STEM Challenge, the Green Grid Challenge invited students in 2026 to design innovative net-zero solutions for the future of motorsport. Delivered through the Driving Learning Program and culminating at the Formula 1® Australian Grand Prix, the challenge connected classroom learning with real-world STEM applications, inspiring future engineers, scientists and innovators.

DESCRIPTION

Designed in collaboration with STEM Hub for students in Years 4-12, the program aligned with the Australian Curriculum across science, design and technologies, digital technologies, mathematics and general capabilities. Through an inquiry-based approach, students built critical thinking, collaboration, communication and problem-solving skills while exploring real-world STEM applications.

In 2026, students were invited to:

Design a “Net Zero Race Car or Pit Stop of the Future” that reduces carbon emissions, energy use, and waste, while maintaining the excitement of racing.

Challenge requirements and curriculum links were tailored for Primary (Years 4-6), Junior (Years 7-9) and Senior Schools (Years 10-12).

AT A GLANCE

- 18 schools registered
- 145 student teams participated
 - 18 Primary school teams
 - 58 Junior school teams
 - 69 Secondary school teams



KEY OUTCOMES

1. Increased student engagement in STEM:

The Green Grid Challenge gave students hands-on, real-world learning experience that strengthened engagement with STEM and built confidence applying knowledge beyond the classroom.

2. Empower student innovation:

Students designed and presented sustainability solutions for motorsport, applying STEM concepts to real-world challenges aligned with the Net Zero future of Formula 1® and the opportunity to present at the Formula 1® Australian Grand Prix.

3. Lasting impact:

Through collaboration and problem-solving, students explored potential pathways in motorsport, engineering and emerging technologies, further reinforced through hands-on engagement in the Innovation Hub.

THE IMPACT

After completing the challenge, students reported stronger engagement with STEM, making it feel more accessible and aspirational. The impact is best captured through the voices of those who experienced it.

TESTIMONIALS

"I never thought I had a huge interest in engineering or maths until taking STEM Hub's F1® Challenge and seeing the F1 teams in the flesh. It actually made me realise how much was involved in motorsport and engineering.

I've actually had a really strong passion for this sport, and it's kind of opened my eyes to a lot of engineering, and I can see all the skills I can use as well in a job."

- Aylin, Engineering student at Monash University

"The impact of STEMHub Challenge has been immense at our school, with the number of students studying STEM subjects constantly increasing since we first engaged with their programs in 2018"

- Mark Robinson, Lead Teacher at Glen Waverley Secondary College

WHY THIS MATTERS

Aylin's story shows the Challenge turning curiosity into confidence, aspiration and tangible STEM pathway progression. For Australian Grand Prix Corporation (AGPC), it demonstrates that its investment supports both school engagement and Australia's future engineering and technical workforce.

