



REPURPOSE FOOD WASTE AS COMPOST AND PET FOOD

To help combat the ongoing global cost of living crisis, students from Girrawheen Senior High School, Perth have been making a difference in their local area using tools from the Shell NXplorers programme.

The STEM teams collaborated to reduce waste and create a better environment for everyone. This project works towards the UN's Sustainable Development Goals (SDGs): zero hunger, sustainable cities and communities, responsible consumption and production, and climate action.



The NXplorers programme has given these students a focus and drive for social good, as well as a sense of community, coming together from various backgrounds to solve a global problem. The National Food Waste Strategy Feasibility Study, released in 2021, reported that food waste costs the national economy of Australia around \$36.6 billion a year, with around 7.6 million tonnes of food being wasted annually.

Considering the cost of living crisis, reducing waste is not only critical to the economy, but also to the environment. Two teams of students from Girrawheen Senior High School – ‘Girrawheen Stars’ and ‘The Cropp’s’ – took on the challenge of repurposing food waste into useful products.

The student teams brainstormed ideas to identify problems within their school community, then joined forces to create sustainable solutions for the food waste problem they found. The teams used NXplorers tools such as the Connections Circle, Perspectives Circle, Feasibility Funnel, Scenario Planning Quadrant and the Persuasion Pyramid. Team ‘The Cropp’s’ created compost with their food waste collection, while team ‘Girrawheen Stars’ used these tools to create dog food out of the food waste they collected.



RECONSIDER FOOD WASTE KNOWLEDGE

Most of the students have been impacted by poverty; some are refugees. This influenced how they felt about uneaten food being wasted and how it was affecting the environment. According to a study by WRAP and Hellman’s in 2022, 61% of food waste occurs in the home.

In addition, 39% of the study’s respondents said they did not know where to access information about reducing domestic food waste, which may be why families report that they throw away the equivalent of one bag of shopping per week. By taking action, the students can educate the adults, and together they could be active changemakers for the world around them.

RECYCLE COMMUNITY WASTE

The Cropp’s contacted Jane Goodall’s ‘Roots & Shoots’ organisation and received a grant, which enabled them to purchase a compost bin and worm starter pack, which was placed outside the home economics room to collect food waste from classes.

The compost created from this has been, and continues to be, used to make the school grounds greener and healthier. The students aimed to boost native planting, growing frangipani trees, rose bushes and lemon trees, the lemons from which they hope to use in their home economic classes. Any excess compost is being sold to generate money for future green projects.

Other local organisations have promised to help improved the native garden over the coming months.

Team Girrawheen Stars had to carefully consider their food waste collection, as their project to create pet food required specific food waste, rather than scraps from the purchased bin.

Thinking about their local resources, they contacted local supermarkets to ask for donations of food that was no longer suitable for sale but still held nutritional value. The pet food was created from this food waste and packaged up with a label to include the ingredients used, as well as the students' company logo and website address. Buyers were able to order online to make it convenient and easy.

CONCLUSION

Both student teams recognised the strength in talking to the wider community to get help and explain their vision and hopes for the future. But real success was achieved by coming together with their fellow students and using NXplorers problem-solving tools to implement their sustainable solutions.

Although this work was based within a small geographical area, the project and research will go a long way to inspire others to take action against climate change and together reach global targets such as zero hunger, and responsible consumption and production. With a national goal of reducing food waste by half by 2030, projects such as these will be vital for communities looking for inspiration and education. The students have become true global citizens who epitomise the Aussie 'mateship' spirit and they now understand that even small changes can have a positive effect on everyone's lives.

HOW THIS PROJECT CONTRIBUTES TO THE UN SDGS

2. Zero Hunger

These projects work towards repurposing food waste to create new food organically for humans and nutritious pet food.

11. Sustainable cities and communities

These projects can guide other schools and communities to a healthier and greener environment for themselves and future generations.

12. Responsible consumption and production

These projects review food waste, making consumers think about what they throw away and how they can repurpose it.

13. Climate action

These projects take action towards the global waste crisis on a local level by growing plants and recycling food waste in their local community.

