CITY OF
TEA TREE GULLY
Naturally Better

Shape Your City

Student handbook

Student name:

Team name:

School name:

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Welcome



Your mission is to develop an innovative, evidence-based solution that could significantly reduce the amount of food waste sent to landfill in the City of Tea Tree Gully.

Welcome to Shape Your City, The City of Tea Tree Gully's annual waste and resource recovery challenge.

This isn't a typical school project. It's an opportunity to investigate a real environmental challenge, think like a professional and develop a solution that could make a genuine difference in your school or local community.

This year, you'll tackle one of Australia's biggest waste challenges, food waste.

Working in teams, you'll investigate why food waste ends up in landfill, explore what is happening in your own school and community, and use the design thinking process to develop an innovative, evidence-based solution.

Along the way, you'll research the issue, collect and analyse evidence, engage with stakeholders, generate creative ideas, test possible solutions and prepare a professional submission for an expert judging panel.

You'll also hear directly from industry experts who are working to solve these same challenges every day, giving you an insight into the careers, technologies and innovations shaping a more sustainable future.

The skills you'll develop throughout this challenge are the same skills used by environmental scientists, engineers, designers, entrepreneurs and community leaders to solve complex real-world problems.

Most importantly, this is your opportunity to make a real impact.

So be curious. Ask questions. Challenge assumptions. Work together. Don't be afraid to test new ideas, learn from mistakes and think differently.

The next great idea to reduce food waste could come from you.

This handbook will be your guide throughout the challenge. It contains practical activities, planning tools, worksheets, reflection tasks and helpful tips. Use it to record your research, organise your ideas, track your progress and develop your final submission. By the end of the project, it will become a record of your team's learning journey and the evidence behind your solution.

1 Investigate

Gather evidence, explore different perspectives and uncover the facts. The stronger the understanding, the stronger the solution will be.

Every great idea starts with curiosity.

Before creating a solution, you need to understand the problem.

Professional designers, scientists and engineers don't begin by asking, *What should we create?* Instead, they ask, *What is really happening?*

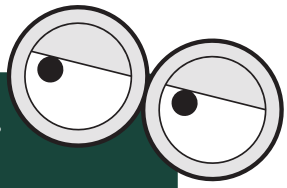
The investigate stage is all about becoming a researcher.

Over the next few weeks your team will investigate how food is used, wasted and disposed of in your school and community.

During this stage, you should:

- Read the challenge brief
- Watch the industry videos
- Research the issue
- Conduct their own audits and observations
- Interview others
- Survey the school or community
- Collect local evidence
- Explore existing solutions
- Identify any knowledge gaps.

The better you understand the problem, the better your solution will be.



Don't assume. Investigate.

Professional researchers use multiple reliable sources to build an accurate understanding of a problem. Think critically by asking:

- Is this information reliable?
- Is it current?
- Who produced it?
- Do other sources support it?
- Can I verify it?

They also ask powerful questions. The better the question, the deeper insight and stronger the solution. For example, instead of asking why do people waste food? ask:

- What causes households to waste food?
- Why do some households waste more food than others?
- What types of food are thrown away most often?
- What barriers prevent people from reducing food waste?
- What information or tools would help?

What do we already know?

Every investigation begins by exploring what we already know.

Before collecting data or researching the issue, take some time to discuss your current understanding as a team. This activity is all about helping you identify what you know, what you don't know, and what you need to investigate. Remember, great innovators don't have all the answers at the beginning. They ask good questions and let the evidence guide their thinking.

Why is food waste an issue?

Why does it matter? Think about people, the environment, money, resources and the future.

Where does food waste occur?

List all the places where food may be wasted, from the farm to your home, school and beyond.

Why do you think food waste happens?

What are some of the reasons edible food ends up being thrown away?

Who creates food waste?

Think about everyone involved in producing, selling, preparing and eating food.

Who is affected by food waste?

Who experiences the impacts of food waste, either directly or indirectly?

What evidence do we have to support our answers?

How do we know our answers are true? Think about observations, personal experiences, conversations, news stories, data or research.

What don’t we know yet?

What information is missing? What assumptions are we making?

What questions do we have?

Write down as many questions as possible. Curious questions often lead to the best discoveries.

What would we like to investigate?

Choose the areas your team wants to explore further during the Discover stage.

Team reflection

After completing these questions, discuss the following as a team.

What surprised us during this discussion?

Which question do we most want to answer?

What should we investigate first?

Who will investigate what?

A successful project depends on everyone contributing. While your team will work together to solve the challenge, it's often helpful for each member to take responsibility for investigating a different part of the problem. Assign roles based on your team's interests and strengths.

Video reflection

As part of Shape Your City, you'll hear from industry experts who are working every day to reduce waste, recover valuable resources and build more sustainable communities. As you watch each video, think like a researcher. Listen carefully, record the most important ideas and consider how this information could help your team better understand the challenge. Remember, the experts aren't giving you the answer, they're providing insights that can help shape your own thinking.

Video 1

What were the three most important messages?

1.

2.

3.

Video 2

What were the three most important messages?

1.

2.

3.

Video 3

What were the three most important messages?

1.

2.

3.

Video 4

What were the three most important messages?

1.

2.

3.

Video 5

What were the three most important messages?

1.

2.

3.

Use this space to record any other interesting facts, statistics or information you heard.

What we discovered



Record every source

Good researchers keep track of where their information comes from. This makes it easy to check your facts and give credit to your sources.

Who has a stake in food waste?

Every problem affects different people in different ways. A stakeholder is any person, group or organisation that is affected by the problem or could help create a solution. Understanding different perspectives will help you design an idea that meets real needs.

Step1: Brainstorm your stakeholders

List everyone who might be connected to food waste in your school or local community.

Think, what creates food waste? Who manages it? Who is affected by it? Who can help?

Step 2: Understand their perspectives

Choose the most important stakeholders and complete the table.

Stakeholder	Why are they important?	How are they affected?	How could they help?

Step3: Prioritise

Not every stakeholder will have the same level of knowledge, influence or involvement. Decide who your team should engage with first to gain the most valuable insights.

Who should we speak to first? Why?

Who is most likely to help you understand the problem?

Who has the greatest ability to make change happen?

Who could help implement or support your solution?

Who is most affected by food waste?

Who experiences the greatest impact from the problem?

Who could benefit most from a successful solution?

Think about who would gain the greatest positive outcome if food waste was reduced.

Whose opinion is missing?

Is there anyone whose voice is often overlooked but should be included?

Step 4: Create your interview or survey questions

Good questions help you uncover useful information. Try to ask open-ended questions that encourage people to explain their thoughts and experiences. Avoid questions that can be answered with just yes or no.

Tips for Writing Great Questions

- Start with What, Why, How, When or Tell me about...
- Keep questions clear and easy to understand.
- Ask about experiences, opinions and ideas.
- Listen carefully and ask follow-up questions if needed.

Our Questions

Question	Why are we asking it?

Possible Questions

- What food is wasted most often?
- Why do you think food is being wasted?
- What challenges do you face?
- What works well at the moment?
- What barriers prevent you from reducing food waste?
- What information or tools would help?
- What changes would make the biggest difference?
- If you could improve one thing, what would it be?

Step 5: Interview/survey each stakeholder

Record what each stakeholder tells you. Look for common themes, interesting ideas and unexpected insights.

Looking for patterns

Researchers don't just collect information. They look for patterns. As a team, review everything you've discovered and answer the following questions.

We noticed...

We were surprised by...

We kept seeing...

The biggest issue appears to be...

We need more information about...

Our biggest discoveries

Congratulations! You have completed the Investigate stage and you now understand the problem far better than when you started. List your top 5 discoveries below.

1.

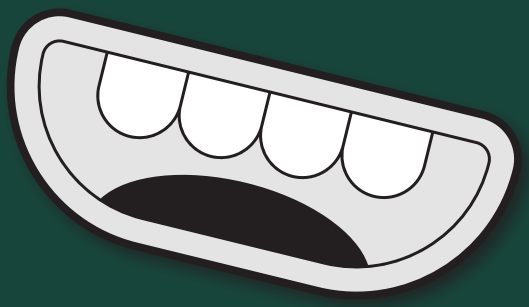
2.

3.

4.

5.

Investigate check-in



Before progressing to the next stage, ensure you can confidently answer yes to the following:

- ☐ Have we researched the issue?
- ☐ Have we used reliable sources?
- ☐ Have we collected our own evidence?
- ☐ Have we spoken with relevant stakeholders?
- ☐ Do we understand why the problem exists?
- ☐ Do we understand what is really happening?
- ☐ Can we support our findings with evidence?

If you cannot confidently answer yes to each question, continue investigating before moving on.



2 Define

It’s time to analyse the evidence, identify the root causes and focus on what really needs to change. The clearer the problem, the stronger the solution.

You’ve gathered observations, interviewed stakeholders and collected evidence. Now it’s time to make sense of everything you’ve learned.

Many people make the mistake of solving the first problem they notice. Great innovators dig deeper. They look beyond the symptoms to uncover the real causes.

During this stage, your team will develop a problem statement that will guide the rest of your project Your problem statement should be clear, evidence based and explain:

- What is happening
- Who is affected
- Why it matters
- What needs to improve

Remember, if you define the wrong problem, you’ll probably design the wrong solution.

Separating symptoms from causes

When investigating a problem, it is important to distinguish between what we see and what is actually causing it. A symptom is something you can observe. A cause explains why it is happening.

Example

Symptom	Possible cause
Food in landfill bins	People don't know food belongs in the FOGO bin
Leftover food going to waste	Families but and cook more than they eat
Food scraps in recycling bins	Bin signage is unclear

Your turn

Symptom	What might be causing it?

Digging deeper with the five whys

The first answer is rarely the complete answer. The Five Whys technique helps uncover root causes by repeatedly asking, *why?* Each answer becomes the basis for the next question.

Example

Problem: Edible food is being thrown into the red-lid landfill bin at school

Why? Because many students don't finish eating their lunch.

Why? Because they bring more food than they can eat.

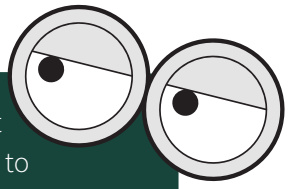
Why? Because parents and carers often pack lunches before knowing what their child feels like eating.

Why? Because there is little communication or planning about what students will actually eat.

Why? Because families don't have simple tools or strategies to plan lunch portions and reduce leftovers.

Root cause: Lunches are often over-packed because families don't have effective ways to plan appropriate portions based on students' preferences and appetites.

Our five whys investigation



The goal of the Five Whys isn't to find someone to blame, it's to uncover the underlying cause so you can design a solution that addresses the real problem.

The problem

Why?

Why?

Why?

Why?

Why?

Possible root cause

Root cause analysis

Food waste is often caused by multiple factors. Use the categories below to explore different possible causes.

People
Knowledge, behaviours, habits, attitudes.

Processes
Systems, procedures, routines.

Environment
Physical spaces, facilities, infrastructure.

Resources
Money, equipment, time, staff.

Communication
Signs, education, awareness.

Policies
Rules, expectations, procedures.

Prioritise the causes

Not all causes contribute equally to the problem. Focus on the causes that have the greatest impact.

Cause	Impact (1-5)	Evidence strength (1-5)

What are the three most important causes?

1. _____

2. _____

3. _____

Why are these causes important?

Writing your problem statement

A problem statement clearly describes the issue your team wants to solve. It should be based on the evidence you collected, not assumptions.

A strong problem statement is focused on one key issue and explains:

- What is happening
- Who is affected
- Why it matters
- What evidence supports your conclusion.

Remember, you're not describing your solution, you are clearly defining the problem.

Here is an example of a problem statement:

> *Our investigation found that large amounts of edible food is being thrown into landfill bins during lunchtime because many students bring more food than they eat. This increases landfill waste and unnecessary costs. Our waste audit, observations and interviews with students and staff all support this finding.*

Build your problem statement

Use the prompts below to organise your thinking before writing your final statement.

What is the main problem?

_____

_____

Who is affected by it?

_____

_____

Why is it happening?

_____

_____

Why does it matter?

_____

_____

What evidence supports this?

_____

_____

Our problem statement

Use your answers to the questions on page 22 to write your problem statement.

Our problem statement

Team review

After you have completed your problem statement, answer the following questions:

- Is the problem clearly explained?
- Is it based on evidence?
- Does it explain who is affected?
- Does it explain why the problem matters?
- Does it avoid suggesting a solution?

If everyone in the group answered yes, then its time to move on to the next stage.

Creating a design challenge

You've identified the problem and uncovered its root causes. Now it's time to reframe your thinking. Rather than asking, *How do we fix this?*, designers ask a more powerful question: *How might we...*

A *How might we...* question transforms a problem into an opportunity for change. It encourages creative thinking without limiting your team to a single solution. The best *How might we...* questions are broad enough to inspire many ideas, but focused enough to solve a real problem.

Example

Problem: Students throw away edible food because they bring more than they can eat.

How Might We...

- ...help students pack lunches they are more likely to eat?
- ...reduce edible food waste during lunch breaks?
- ...encourage students to save uneaten food rather than throw it away?

Build your team challenge

Use your problem statement to write one clear *How might we...* question.

How might we...

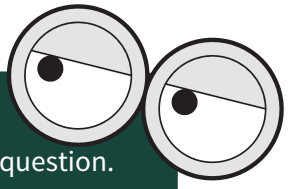
_____

_____

Check your question

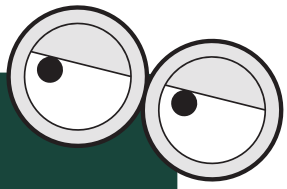
- Is your question based on research and evidence?
- Is your question focused on one key problem?
- Is your question open-ended? (There is more than one possible solution)
- Is your question inspiring and encourages creativity?
- Is your question clear and easy to understand?
- Your question doesn't suggest a solution

If everyone in the group answered yes,
then its time to move on to the next stage.



There is no single right answer to a How might we... question. The goal is to create a challenge that inspires many possible solutions.

Defining success



If you can't measure success, it's difficult to know whether your solution has made a difference.

Good innovators measure whether their solution works. Before designing a solution, decide what success might actually look like.

Imagine your idea has been implemented and everything has gone according to plan.

What has changed?

How have you measured the change?

Bringing it all together

Congratulations! You have completed the Define stage and now understand the problem you are trying to solve and the root causes behind it. Before moving into the Ideate stage, summarise everything you've discovered. This page will become the foundation for your project.

Our problem statement

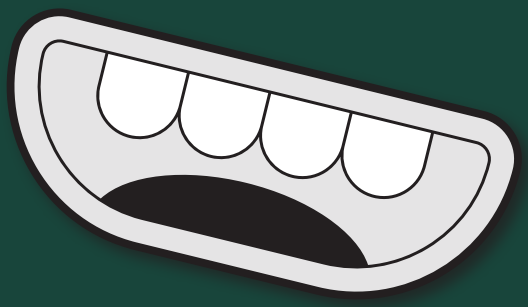
Our three main root causes

Our design challenge - How might we...

Our success criteria

1.
2.
3.
4.
5.

Define check-in



Before progressing to the next stage, ensure you can confidently answer yes to the following:

- ☐ Do we understand the problem?
- ☐ Are our conclusions supported by evidence?
- ☐ Have we identified the root causes, not just the symptoms?
- ☐ Have we written a clear problem statement?
- ☐ Have we developed a strong How might we... question?
- ☐ Do we know what success will look like?
- ☐ Are we ready to start generating ideas?

If you cannot confidently answer yes to each question, continue defining your problem before moving on.



3 Ideate

Explore the possibilities, think creatively and generate as many ideas as possible. The more solutions you explore, the more likely you are to develop a unique, practical and impactful solution.

You've investigated the problem, analysed your evidence and identified the root causes. Now it's time to think creatively.

The Ideate stage is where ideas come to life. This is your opportunity to challenge assumptions, think differently and explore as many possible solutions as you can.

At this stage, don't worry about whether an idea is perfect. Some of the world's best inventions started as unusual or even crazy ideas.

The goal isn't to find the right idea straight away, it's to generate lots of ideas, then identify the ones with the greatest potential.

Remember, the professionals don't stop at their first idea. They explore dozens of possibilities before choosing the best one.

Think like an innovator

Innovation is about seeing opportunities where others see problems. During this stage:

- Think big.
- Be curious.
- Challenge assumptions.
- Build on each other's ideas.
- Stay focused on your *How might we...* question.



The brain dump

One of the best way to start generating ideas is to simply to get every idea out of your head an onto paper.

At this stage, there are no bad ideas. Don't worry about whether an idea is practical, affordable or even possible. The goal is to think freely and generate as many ideas as you can.

Set a timer for 10 minutes and write or sketch every idea you can think of.

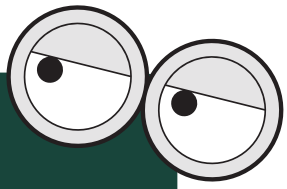
Don't stop. Don't judge. Just create.

Before you start, it's important to agree to a few simple rules. These rules will help your team create a positive environment where everyone feels comfortable contributing.

You might like to use these rules:

- Every idea is welcome.
- Don't judge ideas too early.
- Build on other people's thinking.
- Encourage wild ideas.
- One conversation at a time.
- Stay focused on the challenge.
- Quantity first, quality later.

Our big brain dump



Narrowing your ideas
Each team member receives five votes. Place your votes beside the ideas you believe have the greatest potential.

Use this page to record all the ideas you came up with during your big brain dump.

Evaluating your ideas

Not every idea will have the same impact. Score your top five ideas from one (low) to five (high) using the categories below.

Idea	Impact	Creativity	Cost	Ease	Total

Which ideas scored the highest?

Improving your ideas

Choose one of your ideas from the Brain Dump activity and use the SCAMPER prompts below to make it even better. SCAMPER is a creative thinking tool that helps you look at a problem from different perspectives. It encourages you to challenge assumptions, make improvements and discover new possibilities.

How to use SCAMPER

For each prompt, ask yourself: *What if we...* Use the next page to write down as many ideas as you can.

S – Substitute

- What could we replace?
- Could we use different materials, people, processes or technology?

C – Combine

- What ideas could we combine?
- Could two good ideas become one even better idea?
- Which ideas would work well together?

A – Adapt

- What already exists that we could copy, borrow or adapt?
- What works in another industry or school?

M – Modify (Magnify or Minify)

- What could we make bigger, smaller, faster, simpler, more fun or more attractive?

P – Put to Another Use

- Could this idea solve another problem?
- Could something already available be used in a different way?

E – Eliminate

- What could we remove, simplify or reduce without affecting the idea?

R – Reverse (or Rearrange)

- What if we did the opposite?
- Could we change the order, roles or process?

Which prompts generated the most interesting ideas?

Our new best idea

After using SCAMPER, describe or sketch your improved idea.

Your best idea

Congratulations! You have completed the Ideate stage and have selected the idea with the greatest potential to solve your challenge. Before moving into the Design and Test stage, summarise everything you know about your idea. This page will become the blueprint for your prototype and help ensure your solution remains focused on solving the problem you identified.

Name of our idea

One sentence description

The problem does it solve

Why we chose the idea

1.
2.
3.
4.
5.

How the idea works

.

Who will benefit from it

.

The biggest benefit is...

What resources do we need

The evidence supporting our idea

What could make our idea successful

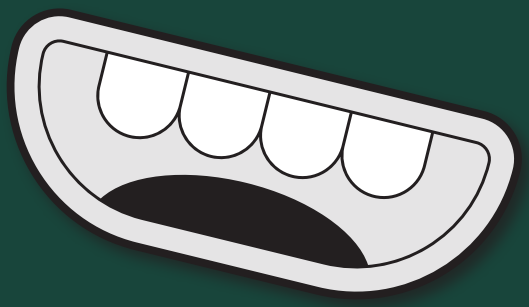
What could stop our idea from succeeding

Ho could we overcome these challenges

The questions we still need to answer

What do we need to test

Ideate check-in



Before progressing to the next stage, ensure you can confidently answer yes to the following:

- ☐ Can we clearly explain our idea?
- ☐ Do we understand how it works?
- ☐ Is our idea based on evidence?
- ☐ Do we know who will use it?
- ☐ Do we know what needs to be tested?
- ☐ Are we ready to build a prototype?

If you cannot confidently answer yes to each question, continue ideating before moving on.



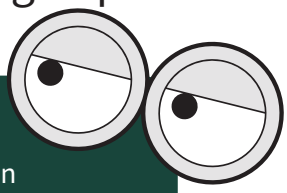
4 Design & test

Transform ideas into action by designing practical, achievable solutions. Careful planning, testing and refinement will help turn a promising concept into a real-world project with lasting impact.

You have identified a problem, investigated its causes and selected your strongest idea. Now it's time to bring that idea to life.

Professional designers, engineers and innovators rarely build the perfect solution on their first attempt. Instead, they create a prototype, test it with users, learn from feedback and improve it over and over again. This process is called iteration.

Every prototype, even one that doesn't work perfectly, is an opportunity to learn something new. Remember, you're not trying to prove your idea is perfect. You're trying to discover how to make it better.



Building a prototype

A prototype is an early version of your idea. It allows you to explore, test and improve your solution before investing lots of time or money

The goal is to communicate your idea, not create the finished product.

Prototype and test planner

Before you start building and testing, take some time to plan your prototype and how you will test it.

Name of prototype

What are you testing

What questions are we trying to answer

What will we need to build the prototype

Who is responsible for building the prototype

Who will test it

How many people will test it

Where will we test it

What question will we ask the testers

Gather feedback

The purpose of testing is to learn, not defend your idea. So encourage honest feedback.

What users liked

Suggested improvements

Questions people asked

What surprised us

New ideas we heard

Evaluate your prototype

Now that you've tested your idea, it's time to evaluate how well it performed. Use the feedback you received, your observations and the evidence you collected to decide what worked well and what could be improved Remember, testing isn't about proving your idea is perfect—it's about learning how to make it better

Did it work?

Statement	Yes	Partly	No
Did our solution solve the problem			
Was our solution easy to understand			
Was our solution easy to use			
Did our solution meet the intended user's needs			
Was it practical and achievable			
Could it realistically be implemented			
Would it have a positive impact implemented			

Our biggest success

What part of your solution worked best?

Our biggest challenge

What didn't work as expected?

Most valuable feedback

What feedback had the greatest impact on improving your solution?

What's next?

Based on our testing, we should...

Refining your design

Testing provides valuable feedback that helps turn a good idea into a great one. Review everything you learned during testing and use the feedback, evidence and observations to decide how your solution can be improved.

What what worked well and what should we keep?

What could be improved to make our solution more effective?

What didn't work well and what should we change?

What new ideas, features or improvements should we make?

Test. Learn. Improve. Repeat. Innovation doesn't stop after one prototype. Each round of testing helps you create a better solution. So keep going.

Are we ready for another round of testing? ☐ Yes ☐ No

Version comparison

Innovation is all about continuous improvement. Every time you test your prototype and receive feedback, your idea should become stronger. Compare your original prototype with your improved version(s) and explain what changed and why.

Remember, every change should be based on evidence and feedback—not guesswork.

Success criteria	Version 1	Version 2	Version 3

What changes did we make and why?

Refining your solution

Congratulations! You have completed the Design and Test stage and have developed a prototype, that is now ready to become part of your submission. Before developing your Submission, take some time to reflect on your design journey and summarise what you've learned.

Our prototype shows...

How does your prototype demonstrate your solution? What are its key features?

The biggest improvement we made

What change had the greatest positive impact on your prototype?

Our solution is now stronger because...

How did testing and feedback improve your idea?

The evidence shows our solution works

What evidence demonstrates that your solution has the potential to solve the problem?

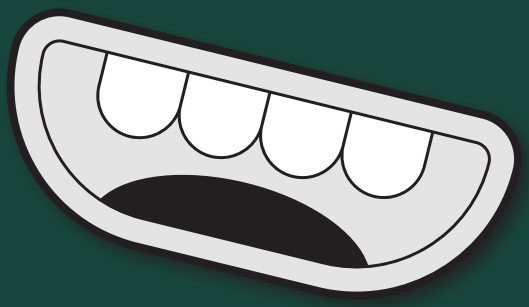
If we had more time...

What would you continue to improve, develop or test?

The thing that most surprised us was...

What did you learn during the design and testing process that you weren't expecting?

Design & test check-in



Before progressing to the next stage, ensure you can confidently answer yes to the following:

- ☐ Have we built a prototype that clearly demonstrates our solution?
- ☐ Have we tested our prototype with the intended users or stakeholders?
- ☐ Have we gathered meaningful feedback and evidence?
- ☐ Have we used that feedback to improve our solution?
- ☐ We can explain how our prototype solves the problem we identified?
- ☐ We can demonstrate that our solution is practical and achievable?
- ☐ We are confident our prototype is ready to be included in our final submission?

If you cannot confidently answer yes to each question, continue prototyping before moving on.



5 Submission

Share your solution with confidence. Clearly communicate the problem, explain your solution and use evidence to demonstrate the impact it could have.

It's time to tell your story

You've researched the problem. You've uncovered the root causes. You've generated ideas. You've designed, tested and improved your solution. Now it's time to share your innovation.

A great idea only creates change if people understand it. Your submission is your opportunity to show the judges:

- The problem you investigated.
- Why it matters.
- What you discovered.
- Your proposed solution and how it addresses the problem.
- The research and evidence supporting your solution.
- The anticipated environmental, financial social and community outcomes and benefits.
- Why the solution is practical, achievable and sustainable.
- Why it should be implemented.

Building your story

Every great presentation tells a story. Think about the journey you've been on.

The beginning - The challenge

How did your investigation begin?

What first made you interested in this challenge? What did you set out to investigate?

What challenge were you trying to solve?

Clearly explain the issue and why it matters.

The middle - What we dicovered

What were your most important findings?

What evidence, research or stakeholder feedback helped you better understand the problem?

How did your thinking change throughout the project?

Did anything surprise you? Did your investigation lead you in a different direction?

The end - Our solution

What is your solution and how does your solution solve the problem?

Explain how your idea works and why it will make a difference.

.

What impact will your solution have?

Who will benefit, and what positive changes do you expect to see?

Elevator pitch

Describe your solution in 30 seconds

.

The five questions

Use the questions below to help organise your ideas into a clear and persuasive story.

What is the problem?

Describe the issue your team investigated.

Why does it matter?

Explain why this issue is important.

What did you discover?

Summarise the most important findings from your investigation.

What is your solution?

Describe your proposed solution.

Why should it be implemented

Convince your audience that your solution deserves to become a reality.

What did you learn

Every stage of the Shape Your City challenge has helped you develop new knowledge, skills and ideas. Take a moment to reflect on your journey and describe one important thing you learned at each stage.

Investigate

What did you discover about the problem through your research, evidence and stakeholder engagement?

Define

How did your understanding of the problem change? What helped you identify the real issue to solve?

Ideate

What did you learn about generating, evaluating and selecting ideas?

Design and test

What did testing teach you about improving your solution? How did feedback influence your thinking?

Submission

What did you learn about communicating your ideas and presenting your solution.

Present your evidence

Great solutions are built on great evidence. Before preparing your final submission, review all the research, data and feedback your team collected. Identify the evidence that best supports the problem you investigated and the solution you are proposing. Choose evidence that is relevant, reliable and clearly demonstrates why your solution is needed.

What are the strongest pieces of evidence showing that this problem exists?

What evidence demonstrates that your solution is likely to work?

Final evidence check

Before moving on, ask yourselves:

☐ Is our evidence reliable and from credible sources?
☐ Does our evidence clearly explain why the problem matters?
☐ Does our evidence support our proposed solution?
☐ Have we included a mix of research, data and stakeholder insights?
☐ Have we used our strongest evidence in our presentation and submission?

Explain your solution

Now it's time to clearly explain your idea. Imagine you're describing your solution to someone who has never heard about your project before. Keep your explanations clear and simple.

What is your solution?

Describe your idea in one or two sentences.

How does your solution work?

Explain how your solution would operate.

Who will use or benefit from your solution?

Who is your target audience?

What makes your solution different?

What makes your idea innovative?

Why will your solution succeed?

Use evidence from your investigation to explain why your solution is likely to work.

Demonstrate the impact

If your solution was successfully implemented, what difference would it make? Great innovations don't just solve problems—they create positive change. Think about who will benefit, how they will benefit, and what evidence suggests your solution will make a difference.

Who will your solution impact?

Who will benefit directly or indirectly from your solution?

How will they be impacted?

Describe the positive changes they would experience.

What changes will happen?

Describe the positive changes they would experience

Why will these changes happen?

Explain how your solution will create these outcomes.

.

If our solution succeeds, it will...

In the long term, our solution could... (Think big picture)

Measuring success

Every successful project includes a way to measure its impact. Think about how you will know if your solution has made a real difference. What evidence could you collect to demonstrate that your idea is achieving its intended outcomes? Remember, if you can't measure success, it's difficult to know whether your solution is working.

What outcomes do you expect your solution to achieve?

How will success be measured?

Success measure	How will we measure it	When will we measure it
5% reduction in avoidable food waste	*Waste audit before and after implementation*	*After 12 weeks*

We will know our solution has been successful when...

Create an implementation plan

A great idea is only valuable if it can be put into action. Think about the practical steps needed to implement your solution. Consider what needs to happen, who needs to be involved, what resources are required and how long each step is likely to take. Remember, your implementation plan doesn't need to be perfect, but it should show that you've thought about how your solution could become a reality.

Step	What needs to happen	Who is responsible	Required resources	Estimated time
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Key Stakeholders

List all the people you will need to support your idea for it to succeed?

What Could Stop Our Idea?

Every project has risks and challenges. Thinking about them now will help you prepare.

	Potential challenge	How you will overcome it
1		
2		
3		
4		
5		
6		
7		
8		
9		

How much will it cost

Whether your solution is a new product, service, education campaign or event, you'll need to consider the resources required to make it happen. Your budget doesn't need to be exact. Instead, estimate the costs involved and think about whether your solution is affordable and realistic to implement. Some items may already be available at your school or could be donated, reducing the overall cost.

Budget planner

Item	Why we need it	Estimated cost
Estimated total cost:		**$**

Is our solution affordable?

How could we reduce our costs?

Who could help fund or support our solution?

Before students submit their work

Before students submit their project, use this checklist to make sure everything is complete.

Team Details

- ☐ Team name included.
- ☐ School name included.
- ☐ Teacher name and contact details included.
- ☐ All student team members listed.
- ☐ Problem statement clearly identified.

Investigation (Maximum 500 words)

- ☐ Conducted research using reliable sources.
- ☐ Collected relevant data and evidence.
- ☐ Engaged with relevant stakeholders.
- ☐ Identified key findings from the investigation.
- ☐ Included evidence to support conclusion.

Problem Definition (Maximum 500 words)

- ☐ Clearly defined the problem.
- ☐ Explained why the problem is important.
- ☐ Identified who is affected.
- ☐ Adequately justified the problem statement.

Solution Development (Maximum 500 words)

- ☐ Developed an innovative solution.
- ☐ Considered alternative ideas.
- ☐ Explained how the solution addresses the problem.

Feasibility (Maximum 500 words)

- ☐ Demonstrated the solution is achievable.
- ☐ Considered costs and available resources.
- ☐ Identified potential challenges or risks.
- ☐ Explained how barriers could be managed.
- ☐ Demonstrated stakeholder support .

Implementation (Maximum 500 words)

- ☐ Included a clear implementation plan.
- ☐ Identified key actions.
- ☐ Included a realistic timeline.
- ☐ Assigned responsibilities.
- ☐ Included a budget or estimated costs.
- ☐ Identified required resources.
- ☐ Explained how success will be measured.

Impact (Maximum 500 words)

- ☐ Explained the expected environmental, financial, social and/or community benefits.
- ☐ Estimated the scale of the impact.
- ☐ Explained how long-term success could be maintained.

Submission

- ☐ Submission follows the required format.
- ☐ All required documents are included.
- ☐ All references are correctly acknowledged.
- ☐ It is clear, engaging and well organised.
- ☐ Visuals are easy to understand.
- ☐ Evidence and data is presented accurately and correctly referenced.

If you answered **yes** to every item above, your project is ready to submit.

Good luck! And remember, the strongest projects aren't always the biggest. They're the ones that are well researched, evidence-based, creative, practical and capable of making a real difference.

6 Reflect & celebrate

Reflect on your journey, celebrate the achievements and recognise how far you and your team have come.

Congratulations! You have completed the City of Tea Tree Gully's Shape Your City challenge.

Throughout this project you have investigated a real-world problem, gathered evidence, generated ideas, built and tested a prototype and shared your solution.

Before you finish, take some time to reflect on your journey. Reflection helps us understand what we learned, what we achieved and how we can continue to grow.

Professional regularly reflect on every project, not just to celebrate success, but to identify opportunities for improvement.

Remember, innovation isn't just about creating great ideas. It's about becoming a better thinker, collaborator and problem-solver.

Whether your idea wins an award or not, you have already made a difference and gained practical skills in the process that will help you throughout school, future careers and everyday life.

The challenges facing our communities won't be solved by one person. They'll be solved by curious, creative and determined people who are willing to ask questions, work together and take action.

People just like you.



Take a few minutes to think about your Shape Your City journey. This is your opportunity to reflect on what you learned, how you grew and the impact you hope to make.

The achievement I am most proud of was...

The biggest challenge I faced...

One thing I learned about myself...

I discovered I am good at...

What I learned

The biggest thing I learned about food waste was...

The most surprising thing I discovered was...

One piece of evidence or information that changed my thinking was...

If I could do this project again, I would...

Looking forward

One action I will take to reduce food waste is...

One thing I hope people remember about our project is...

_____

_____

_____

Skills development

How much do you think each of the following skills has improved?

What needs to happen	A little	Some	A lot
Research			
Critical thinking			
Creativity			
Problem solving			
Teamwork			
Communication			
Leadership			
Planning			

Which skill improved the most?

_____

_____

_____

Which skill would you like to continue developing?

_____

_____

_____

One way I will use the skills I developed in future projects or everyday life is...

_____

_____

_____.

My Shape Your City Journey

Circle the word that best describes your overall experience:

Inspiring Rewarding Creative Collaborative Challenging Impactful

In one sentence, Shape Your City was...

_____

_____

_____.

Because of this challenge...

I now understand...

I now believe...

I now want to...

I will continue to...

The Shape Your City Challenge may be over, but your journey as an innovator is just beginning. Keep asking questions. Keep solving problems. Keep making a difference. The future of our communities depends on people who are willing to imagine better solutions and make them happen.


CITY OF
TEA TREE GULLY
Naturally Better