

# **BIG IDEAS INSIDE**

- What is the problem with waste?
- Why recycling systems matter
- Understanding GO waste
- How to be a GO Game Changer
- And more...







GO GAME CHANGERS is a live, in-school experience led by two actors who'll take you through fast, funny, interactive sketches, where you don't just watch, you get involved.

In this fast-paced, game show-style incursion, students compete in interactive challenges to tackle real-world waste and recycling issues. With humour, competition, and science focused games, students learn how recycling works, why it matters, and how community choices impact waste outcomes and the climate. From source separation to community responsibility, students walk away as **Good to GO Game Changers** at school and at home.



# **WORDS TO KNOW**

### Compost:

Compost is a natural fertiliser made from broken down organic materials.

### **Decompose:**

A natural process where tiny living things called microorganisms break down organic matter into simper materials.

### **Garden Organics:**

The natural, plant-based materials you find in your garden like grass, leaves, small branches, sticks, palm fronds and weeds.

### **Greenhouse Gas:**

Gases in the Earth's atmosphere that trap heat, such as carbon dioxide and methane.

### Landfill:

A big hole in the ground where our general waste gets buried.

### Microorganisms:

Tiny living things that can break down organic matter through a process called decomposition.

### **Natural Resource:**

Something that comes from the environment that we use, like trees, minerals and water.

### **Nutrient Cycle:**

The movement of nutrients from non-living material to living organisms and back again to facilitate life on Earth.

### Pollution:

When harmful materials contaminate the air, water, or land and make the environment dirty or unsafe.

### **Recycling:**

The process of collecting and transforming materials that would otherwise become waste into new and usable things.

#### Resource:

Something we can use.

### Sustainability:

Using resources today in a way that ensures there are enough for the future.

#### Waste:

Anything left over or thrown away after we use or consume something.



# PROBLEM WITH WASTE

# **NHAT IS THE**

Every day, we throw things away: food scraps, packaging, and broken stuff. Much of what we call "waste" is actually a resource in the wrong place. If we manage it properly, those resources can be turned into something useful again.

When rubbish goes into our general waste bins, it's sent to landfill. If recyclable or reusable items end up there by mistake, valuable natural resources can't be reused or recovered. More waste in landfill also means more methane gas is released, which is a powerful greenhouse gas with a global warming effect around 28 times stronger than carbon dioxide ( $CO_2$ ).

- ち Each year, Queensland generates over 9 million tonnes of waste and the amount is still growing.
- 🤼 Much of this waste ends up in landfill, taking up space and creating pollution.
- 🤼 Plastics are especially damaging. Scientists at the CSIRO predict that by 2050, nearly all seabirds will have eaten some form of plastic.

### Did you know:

Landfill acts a trap locking things away from the natural breakdown processes so things can take hundred or thousand of years to breakdown.

Landfill doesn't have to be the end of the story. When we recycle, compost, or reuse, waste becomes a resource. That means less pollution. fewer greenhouse gases, and more materials that can go back into making new things.

### Be a GO GAME CHANGER:

The best way to tackle waste is not to make it in the first place! Choose products with less packaging, buy only what you need, and repurpose items before throwing them away. Every bit of waste you avoid means less going to landfill.



### Think:

Did you know you can regrow veggies like lettuce and spring onions from kitchen scraps? It's a simple way to cut down waste and grow your own food at home. What's one way you could reduce waste before it even reaches the bin?



Recycling is more than just "good practice", it's a system that keeps valuable materials in use and reduces environmental damage.

## Conserves resources:

Making aluminium cans from recycled aluminium uses 95% less energy than producing them from raw materials.

> Source: aluminium.org.au/ sustainability-main/recycling/

## Reduces pollution:

Diverting garden waste from landfill prevents methane gas emissions.

# Protects ecosystems:

Recycling reduces the need for mining, logging, and excess water use.



Recycling just one aluminium can saves enough electricity to power a TV for 3 hours.

Source: Brisbane City Council, Recycling Fact Sheet: Aluminium



### **Explore:**

Did you know recycled plastic bottles can be turned into polyester fabric used to make school uniforms? **Pick one item you recycle often and research what it could be turned into!** 



# WHAT

In Ipswich, every household has three main kerbside bins. Knowing what goes in each bin is one of the simplest ways to be a GO Game Changer.



### RED LID General Waste:

Non-recyclable items like disposable coffee cups, plastic bags, broken ceramics, and food scraps (if not composted at home, see page 7 for more info on composting) should go in the general waste bin.



# YELLOW LID Recycling:

Recyclable items like paper, cardboard, firm plastics, glass bottles and jars, aluminium and steel cans should go in the recycling bin. Items must be put into the recycling bin clean and loose, never bagged.



### GREEN LID GO (Garden Organics):

Natural materials from your garden should go in the Garden Organics bin. This bin is new, so we devoted an entire page to it! See the next page for more details!

### **Hot Tip:**

Some things don't belong in ANY household bin, like batteries, e-waste, or chemicals. Visit Ipswich Council website for drop off points.

### Contamination

Recycling only works if it's done properly. One of the biggest challenges is **contamination**, that's when the wrong items, or dirty items, end up in recycling bins. If there's too much contamination, a whole truckload of recycling may have to be sent to landfill.

# Be a GO GAME CHANGER:

Keep contamination out of your recycling bin. That means no cling wrap, and definitely no batteries or electronics. Make sure bottles, jars, and cans are empty, then pop them loose into the yellow bin, and save garden waste for the green GO bin. This makes sure everything in your recycling and GO bin actually gets recycled or recovered.



# NDERSTANDING

In Ipswich, the green lid GO bin is for Garden Organics only. The GO bin is collected fortnightly to keep garden waste out of landfill, returning nutrients to the soil as compost.



Garden Organics (GO) are the natural materials from your yard or garden that can safely break down into compost.

### GO:

# What CAN go in the GO Bin

- Grass clippings and lawn cuttings
- Leaves, palm fronds, and weeds
- Shrubs, prunings, and small branches
- Loose bark, twigs, and flowers

### STOP:

# What **CANNOT** go in the GO Bin

- Food scraps and kitchen waste
- Plastic bags or packaging (even compostable ones)
- Glass, metals, recyclables, or general rubbish
- Treated wood, soil, rocks, or large logs
- Pet waste, nappies, or chemicals

### Why it Matters:

When the wrong items are placed in the GO bin or recycling bin, they can make a whole bin or even truck load too difficult to recycle, meaning it all has to be sent to landfill.

Keeping the GO bin for Garden Organics only ensures that local green waste can be transformed into compost. This compost is then used in community landscaping projects, to improve soil in local parks, and to help maintain gardens across the city. Instead of lost to landfill, your garden waste comes back to the community as a useful resource. See page 7 to read more about composting and the nutrient cycle!

### **GO Fact:**

Recovering Garden
Organics through the
GO bins in addition
to producing soil
improving compost
also reduces the
resources lost to
transporting and
disposing waste at
landfill sites.



# THE NUTRIENT CYCLE

# COMPOSTING AND

When organic material breaks down, it creates compost, a nutrientrich material that returns goodness to the soil. Plants take nutrients from the soil to grow. When plants, food scraps, and garden organics are composted, those nutrients return to the soil to help grow new plants. This natural loop is called the nutrient cycle.

### **Why Composting Matters**

- Improves soil health by adding organic matter
- Reduces fertiliser use by providing natural nutrients
- 🔼 Helps soil hold water and stay healthy
- 🤼 Reduces greenhouse gases by keeping food scraps out of landfill

### Ways to Recycle Food Waste at Home

Although food scraps no longer go in Ipswich's GO bin, they don't have to end up in landfill! Here are some excellent ways to recycle food waste at home:

- Home Composting A backyard bin or pile where fruit and veggie scraps, garden clippings, and other organics break down into compost for the garden.
- 🤼 Worm Farms Worms eat certain food scraps (like fruit, veg, and grains) and turn them into nutrient-rich "worm castings" and liquid fertiliser for plants.
- Bokashi Bins A sealed indoor system that uses microbes to ferment food waste, including meat, dairy, and cooked foods. These break down safely when the fermented scraps are buried in soil.

### Be a GO **GAME CHANGER:**

Combine Ipswich's GO bin for garden waste with your own home composting system for food scraps, and households can recycle almost all of their organics! Together, these systems close the loop, turning waste into a resource!



### **Question:**

How much of your household waste do you think could be composted instead of sent to landfill? A little, about half, or almost all of it?



# MINDFUL

# Flow of Connection: Honouring Land, Water, and Community by First Nations artist Danielle Leedie Gray

This artwork captures the essence of land, water, and community through a harmonious composition of native flora, pathways, and symbolic elements. People and community symbols are depicted along a river and winding path, representing journey, connection, and shared stories. The river signifies life, flow, and nourishment, weaving through the landscape and linking different parts of the land, with rocks embedded within the water to symbolise strength, stability, and foundational connections. Flora flourish around the people, highlighting the importance of caring for country and respecting natural resources. This artwork underscores the relationship between people and land, illustrating a cycle of connection, responsibility, and sustainability. It encourages students to reflect on their place within the land and how their actions can support cultural stewardship and environmental wellbeing.



### **Flora**

Flora flourish around the people, highlighting the importance of caring for country and respecting natural resources.



The river, signifies life, flow, and nourishment as it weaves through the landscape. Elements of rocks within the water represent strength, stability, and the foundational connection to land, emphasising the enduring relationship between water, land, and community.



### Persons/Community

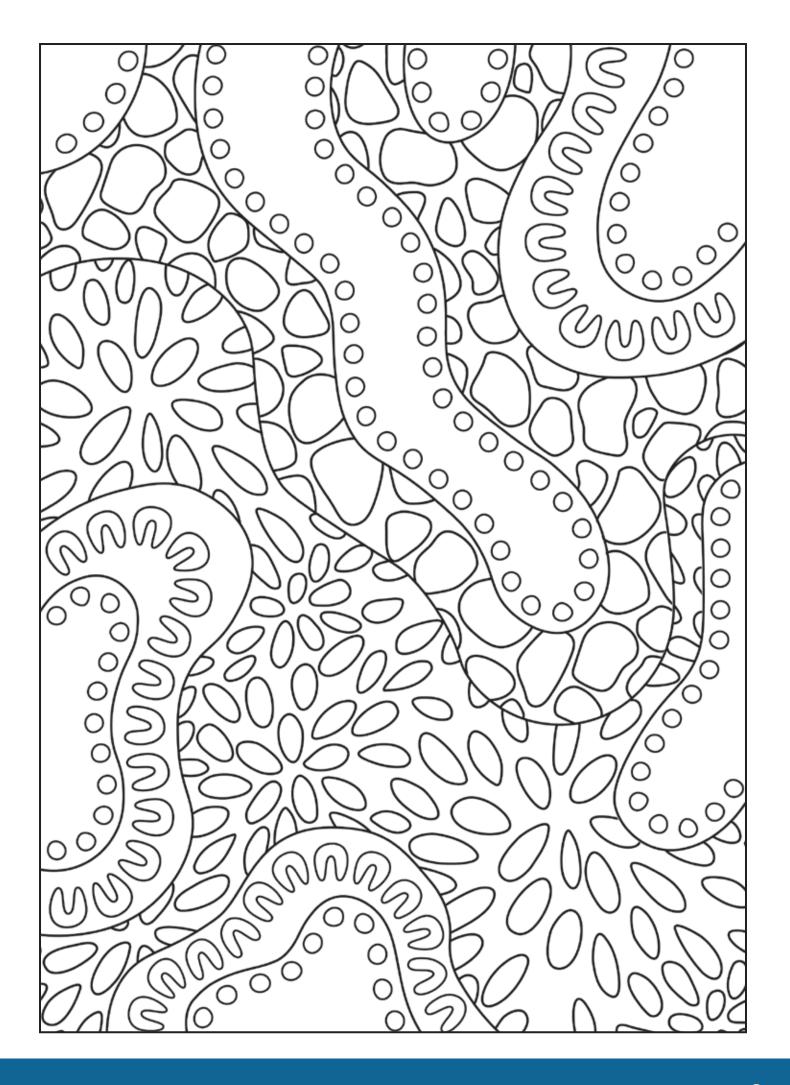
People and community symbols are depicted along a river and winding path, representing journey, connection, and shared stories.



### Path

Symbolising journey, connection, and shared stories that link different parts of the land and represent ongoing movement and relationships.







# GO GAME CHANGER

# HOW TO BE A

You have the power to make a difference every day. Being a GO Game Changer means:

- AVOID Choose products with less packaging.
- REDUCE Only use what you need.
- REUSE Repair, donate, or upcycle.
- RECYCLE Follow Ipswich's bin rules and keep contamination out.
- COMPOST Use GO bins for garden waste and compost food scraps at home.

### **Quick Fact:**

Ipswich's GO bins are collected fortnightly, alternating with recycling bins.

By making these habits part of your routine, you help build a circular economy where waste is not the end, but the beginning of something new. Ipswich's recycling systems rely on community participation. Every student, family, and school plays a role in reducing waste!

### **Careers in Recycling and Sustainability**

Did you know? The recycling and sustainability sector is one of Australia's fastest growing industries. People who care about waste, resources, and the environment can turn that passion into a career.

- Engineering & Technology designing recycling facilities, composting systems, and waste-to-energy plants.
- Environmental Science researching new ways to reuse materials and protect ecosystems.
- Logistics & Operations managing collection services, bin systems, and recycling plants.
- Community Engagement teaching communities about recycling, leading programs, or working in schools.
- Trades & Construction reusing materials in building and developing sustainable infrastructure.

### Be a GO **GAME CHANGER:**

Careers in waste and recycling are about more than rubbish, they're about creating smarter systems for the future. So whether you're passionate about science, problem-solving, community work, or technology, there's a place for you in the circular economy.



### Act:

Did you know Aussies recycle about half of their household waste? Every new recycling habit helps lift that number higher. What's one new habit you'll commit to starting this week to be a GO Game Changer?

## Hey Students, Teachers and Parents



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# PROJECT-GO.COM.AU

for digital games, videos, activities and more!















