# Case Study – Design a new Waste-to-Energy Plant

## Scope of decision

Within 6 months, decide how to design and fund the region's first waste-to-energy plant.

## Background

Your Council has announced a waste reduction policy that commits to

- Reduce total waste generated by 10% per person by 2030
- Recover 80% of all waste by 2030
- Halve the amount of organic waste sent to landfill by 2030

The policy involves a public education campaign, incentives to businesses to reduce waste and a **new waste-to-energy plant**.

The waste-to-energy plant is a waste management facility that combusts food and organic wastes to produce electricity. It will **treat food waste to generate electricity and produce compost for agricultural uses**. Council plans to

- Introduce a Food Organics and Garden Organics (FOGO) kerbside collection service that allows food scraps to be added to garden waste bin
- use 60 per cent of the city's waste
- generate power for 30,000 homes.

There is only one other waste-to-energy plant in the country, so it's exciting for Council, but there are a lot of myths about how it will work and if it's safe.

## **Engaging the Community**

While the exact location of the new waste-to-energy plant is still to be decided it will be in the outlying industrial precinct which has been zoned for this type of infrastructure for the past 20 years. As the population has grown, housing is getting closer to the industrial precinct, but it's still the best location.

Council also needs to engage with the community and stakeholders to design the plant and determine how best to fund it. Key decisions to be made are:

- The exact location of the plant
- The technology used
- How to manage odours, truck movements and noise
- Should the estimated \$50million plant be funded and run solely by Council, or in a partnership with the private sector?

## What next?

Council has 12 months to complete the engagement and finalise its plan.

Your challenge is to develop a community and stakeholder engagement program to inform the development of the plan.

## Stakeholders who may want to participate

All residents, nearby residents, environmental and recycling groups, businesses in the industrial precinct, recycling industry, Council, State and Federal MPs, food industry, schools.

#### **Issues and effects**

Cost, rates, environment, emissions, technology, impacts, employment, productivity, waste.