

## PIONEERING SUSTAINABLE SOLUTIONS

RIVERINA & MURRAY REGIONAL RESOURCE RECOVERY TEAM **Department of Planning and Environment** 

## Challenge Brief Circular Economy

**Smart City Innovation Challenges** 

March 2022

Proudly funded by



This initiative is supported by the NSW Government through the NSW Environmental Protection Agency.





## CIRCULAR ECONOMIES FACE SPECIFIC CHALLENGES IN REGIONAL AREAS

**High Transport Costs** 

Lack of Infrastructure

Limited Resources

**Old Fashioned Attitudes** 

Landfill can be Cheaper than Recycling

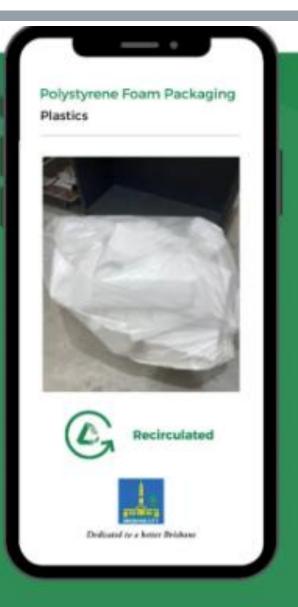
How can innovation help overcome these barriers?

## CURRENT CE TECHNOLOGY ASPIRE PLATFORM

- Subscription-based
- Only includes data from signed-up businesses
- High cost for councils or large organisations
- Need for a regional alternative: Why Aspire doesn't fully meet regional needs.

# Another successful exchange at ASPIRE! Join us in creating a sustainable future through collaborative resource exchange!





## CE DATA PORTAL INTRODUCTION

### Origins

 \$1m grant from Transport NSW Innovation Fund.

#### Developer

- Peclet Software
- RAMJO & Albury City's Role
  - Testing, data validation and recommendations.

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### DATA PORTAL -KEY FEATURES

## Predictive Waste Output: Using ABR data and French models to anticipate regional waste streams.

### Challenges in Data Validation:

Registered vs. actual business locations.

Registered business names differing from trading names.

Addressing these issues in the trial for better accuracy.



**CASE STUDY 1** 

**FOREST ONE** 

Converts pallets to timber laminate.





### **CASE STUDY 2**

### **GOTERRA**

Converts organic food waste into protein for animal feed



## DEMONSTRATION



### **Industrial Symbiosis Data Analysis**

5,013 producers 1,444,336 t/year of residual materials

Include low confidence predictions (1)

Existing takers 

Potential takers 

Potential takers 

Producers 

Search 8. Filters

Bathurst

The fire-challenge-magovernment opendatasoft com/pages/circular-economy project

# BENEFITS OF THE CE DATA PORTAL MODEL:

Unrestricted Access to Business Waste Data

The model allows businesses to share their waste data without major restrictions, providing valuable insights into regional waste streams. This transparency enables:

- Better Future Planning
- Identification of Opportunities
- Collaboration

## ADDRESSING THE RISKS

Concerns Over Data Privacy: While unrestricted data access has many benefits, there is a risk that businesses may be hesitant to participate if they fear their data will be publicly visible.

- Mitigation Options:
  - Opt-in privacy controls
  - Aggregated, anonymized data

### **KEY RECOMMENDATIONS**



# COMMENTS & QUESTIONS