

Uraia Platform Inspiring Practices Catalogue

ASPIRE State of Victoria, Australia

Project title

ASPIRE: a match-making tool for resource re-use and economic development, State government of Victoria, Australia

Background

The State of Victoria, in Australia, found that waste disposal in landfills for businesses had grown importantly going from \$30 AUD a ton in 2010, to \$58,50 AUD in 2014, and this was reducing the competitiveness of local businesses and particularly small and medium enterprises (SMEs) from the manufacturing sector. To face this challenge, a software tool called ASPIRE (Advisory System for Processing, Innovation & Resource Exchange)¹, was created to help local businesses cut waste disposal costs by matching them with other businesses which can put the waste to good use. ASPIRE is a collaborative project developed in partnership between the State of Victoria who provided a grant to fund the project, CSIRO (Commonwealth Scientific and Industrial Research Organization) who developed the tool, and the City of Kingston who led the project implementation with partner local councils and business associations. It has been active since September 2015 and is freely available to businesses within the partner regions. This match-up system is built as an online marketplace which identifies potential business to business resource exchange in order to allow waste from one company to be used as raw materials for another, by matching businesses with potential purchasers or recyclers of their waste by-products.

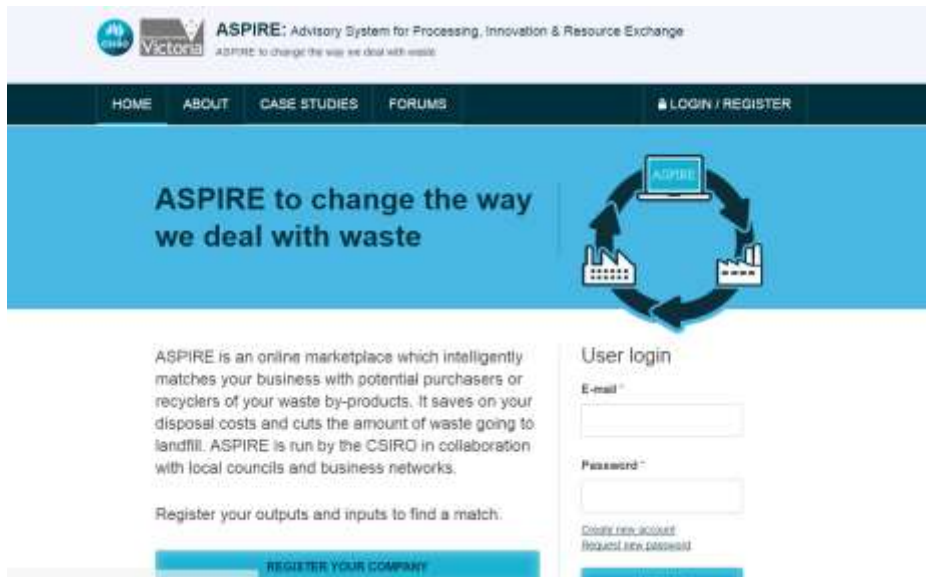
The SMART tool²

ASPIRE users are invited to join via their local council or business network. They create a user account and enter details about the type and quantity of their output/input needs. ASPIRE provides automatically the following personalized information according to the profile of the user:

- Information about waste management possibilities for business and local recycling options, potential sources and destinations for the materials.
- A list suggesting business-to-business solutions, with options for aggregation with other local businesses and local recyclers with resource matches.
- Case studies for related resources matches and new processes, and resource information on innovative reuse and recycling initiatives for materials.
- A dynamic overview of information about the manufacturing material flows in their region.
- Access to an internet forum where SMEs can find topical discussions on resource sustainability questions and engage with academic researchers and the industrial sustainability community.

¹ <https://aspire.csiro.au/>

² <http://www.csiro.au/en/Research/MF/Areas/Innovation/Reducing-waste-through-ASPIRE>



A concrete example

A successful example³ of business match-making by ASPIRE is the partnership created between the companies Viridian, specialized glass manufacturer; and Olympic Polymers, specialized in recycling post-industrial plastic waste. Viridian identified, cleaned and segregated the various grades of usable plastic film and plastic pipe waste, and the plastic was then collected by Olympic Polymers and converted into high quality plastic resin pellets for reuse in industry. Viridian's waste collection bill and landfill costs have been reduced by at least 30% as a result of sorting, baling and then recycling plastic film waste and plastic pipes to Olympic Polymers, which corresponds to \$15.000 AUD to \$20.000 AUD per year of cost savings to the business. This successful exchange has also diverted between 600-800kg/week or 36,400kg/year of plastic film from landfill. Olympic Polymers have benefited from the additional feedstock delivered by Viridian at no cost.

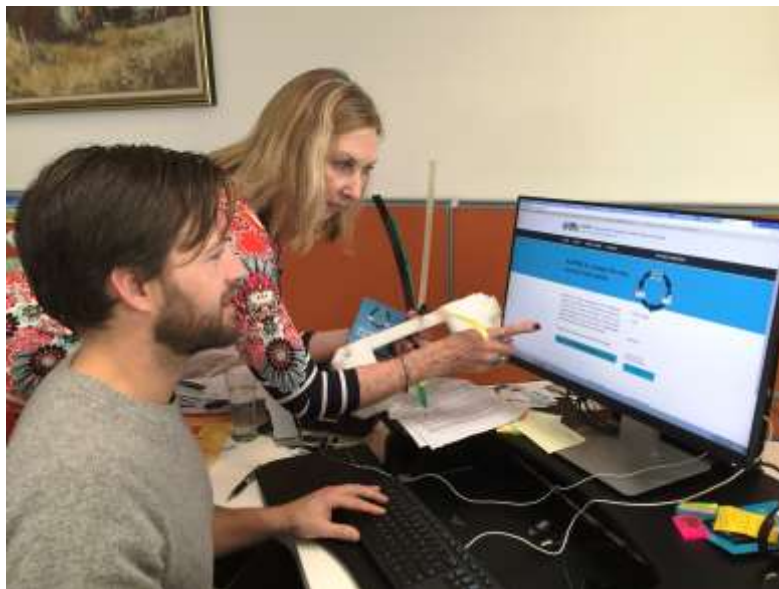


Benefits

A match-making tool such as ASPIRE may have numerous benefits, including:

³ https://aspire.csiro.au/sites/default/files/viridian_olympicpolymers_finalapproved.pdf

- Reduce business operating costs by reducing waste disposal costs, and thus, delivering productivity benefits to SMEs.
- Improve business awareness of waste/resource streams, and increased knowledge about alternatives to resource disposal and resource exchange opportunities.
- Improve business networking, local connection between businesses, create supply chain partnerships and potential new markets.
- Inspire innovation in resource reuse and recycling, driving greater engagement in recycling and alternatives to landfill.
- Create new business opportunities and jobs, and thus improve the **economic development outcomes of the region**.
- Transform current business practice, by fostering the circular economy, increasing collaboration, changing the way we deal with waste, and generating alternative supply chain pathways for resources, cycling useful materials extracted from waste back in to the supply chain to be used again.
- Increase waste diversion from landfills, thus saving money for the city by reducing landfill operating cost efficiency, and reducing emissions.
- ASPIRE also helps local governments to capture data regarding local businesses to improve decision making.



Challenges & lessons learned

Although it is too early to tell the degree of success and challenges face by the project, it is possible that the platform only works if it is widely used and manages to have a strong database with business information. To ensure the success of the project, this clearly means that a strong communication campaign is necessary and that State government of Victoria and CSIRO will need to rely on partnerships with local councils and business associations.