

# **Circulate, NSW EPA Industrial Ecology Information for Applicants**

(Formerly known as the Industrial Ecology Business Support Network Grants Program)

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Submitting your application				
Closing time fo	r applications is <b>5 pm Friday 11 September 2015.</b>			
No late application	ations will be accepted.			
You can submi	t your application by one of three methods.			
By e-mail:	<u>industrial.ecology@epa.nsw.gov.au</u> with subject line 'Circulate, NSW EPA Industrial Ecology'			
or				
By post:	Applications: 'Circulate, NSW EPA Industrial Ecology' Waste and Resource Recovery Infrastructure NSW Environment Protection Authority PO Box 668 Parramatta NSW 2124			
For further information, phone Phil Molyneaux, Senior Project Officer on (02) 9995 6873				

## 1. Background

The NSW 2021 Plan sets out a recycling target for commercial and industrial waste (C&I) to 70% by 2021; however, levels of recovery for commercial and industrial waste, as measured in 2010/11, were at 57%. To help drive further progress towards recycling targets, a review of the Waste and Environment Levy was undertaken by KPMG in 2012. The \$35 million Business Recycling Fund has been established under the NSW Environment Protection Authority's (EPA) *Waste Less Recycle More* initiative as part of the NSW Government's response to the review. The Fund aims to drive waste avoidance and industrial ecology in businesses across NSW. The key to achieving this is to encourage source separation of materials for recovery. The Fund is comprised of six sub-programs, including the \$4.29 million 'Circulate, NSW EPA Industrial Ecology' program.

Since 2008, the EPA and the Office of Environment and Heritage (OEH) have been actively involved in delivering innovative programs to facilitate the large scale reuse of C&I waste by business. These activities are usually referred to as either industrial symbiosis (IS) or industrial ecology (IE).

In 2011–12, the EPA commissioned Databuild to develop a business case supporting the design and implementation of an enhanced industrial ecology program for NSW. The business case developed by this study found a strong value in the development of an EPA supported industrial ecology network for NSW. A network of facilitators are used to increase recycling opportunities between businesses with a focus on commercial and industrial waste.

The study noted that such a program would need to:

- establish a network of specialist, capable, qualified and connected facilitators to work with large waste producers
- establish opportunities to recruit potential waste users
- provide education and capacity building amongst those not in the initial target market
- · provide support to record and disseminate opportunities and successes
- provide branding and marketing support
- apply a monitoring and evaluation framework to observe progress.

The Databuild business case made clear that there was a need to appoint facilitators across NSW and emphasised that the success of an EPA industrial ecology program would rely on the character and ability of the facilitators that the EPA appointed. The facilitators would be the local face of the program, will be responsible for the success of the program and would be self-motivated and possess a range of skills.

Across four years, Circulate, NSW EPA Industrial Ecology (formerly known as the Industrial Ecology Business Support Network Grants Program) seeks to engage with 1000 medium to large enterprises to establish approximately 100 industrial ecology projects. During this period the program is targeting 160,000 tonnes of landfill diversion and \$21 million dollars in additional income and/or savings for participating businesses. The program will focus on the recovery of wastes currently being sent to landfill.

In 2013–14 the EPA conducted an audit of commercial and industrial waste and found that nearly 1.8 million tonnes of waste was sent to landfill from commercial and industrial businesses in the NSW regulated area, 80% of this material came from the Sydney Metropolitan Area (SMA). A key priority of this program is to increase the recovery of commercial and industrial waste sent to landfill, according to the audit a total of 83% of commercial and industrial waste is potentially recoverable (if the contents of garbage bags are accessed and when new facilities and technologies become available).

The commercial and industrial waste currently being disposed of consists mainly of masonry materials, garden organics, plastic, paper and cardboard, and 'other' materials which includes fines, shredder floc and pulp. Around 51% of the total is degradable organic material, such as wood, paper, cardboard, food, textiles, vegetation and nappies. Packaging material, including packaging made from plastic, paper, cardboard, glass and metal, make up 19% of commercial and industrial waste.



Figure 1: Composition of NSW C&I Waste including content of garbage bags

This is the second of two rounds of grants establishing the industrial ecology network across NSW. The first round commenced in June 2014 and was completed in June 2015. This first round of the program directly recovered 20,000 tonnes to June 2015. Many of the businesses involved made commitments indicating that projects that had already started would be ongoing and could divert a further 100,000 tonnes by June 2016. Businesses involved in the program have indicated that they are committed to identifying more opportunities for recovery. Arrangements that businesses have been introduced to represent a number of advantages to their current operations, including cost savings. The first round of the program will continue achieving outcomes past 2015-2016 with an ongoing commitment of around 80,000 tonnes per year.

## 2. Circulate, NSW EPA Industrial Ecology Program

The aim of the Circulate, NSW EPA Industrial Ecology program is to provide business with support to identify viable industrial ecology opportunities and minimise the risk a business faces when considering using waste material as an input in their production or service. It will achieve this by overcoming barriers to change and establishing realistic business cases.

Each program application must nominate a facilitator, a region and a target resource stream, see below Figure 2 – Circulate, NSW EPA Industrial Ecology Program and Project Structure (note that this is an example, actual programs and projects will be dependent upon applications received and approved). Applicants are asked what they believe are realistic targets for their chosen resource stream in that region and the projected dates for achieving these targets over the course of the grant.

Each program will be based around an experienced facilitator who will be the face of Circulate, NSW EPA Industrial Ecology. Facilitators will perform most of the work and are responsible for seeing that the work is done. They are required to commit a minimum amount of their time to building and maintaining the local network and achieving agreed outcomes. A facilitator will usually have a support team providing administrative assistance.

The EPA is interested in facilitating the best possible industrial ecology projects across NSW, covering a wide range of industries and resource types that are currently disposed in landfill. It is recognised that individual facilitators are unlikely to have networks and expertise in every industry and/or supply chain where industrial ecology might be beneficially applied. Therefore, in addition to having well established networks and networking capabilities, facilitators and their support teams will need to demonstrate a broad range of technical expertise and the ability to access additional expertise through other members of their team or through specialist contractors.

Apart from direct funding, the EPA will support the program by:

- providing feedback on project proposals including specialised technical assistance for difficult recovery issues
- delivering regular training events for facilitators and guests invited by the EPA
- publishing a Circulate, NSW EPA Industrial Ecology newsletter showcasing progress of the program
- providing resources such as project templates, case studies, factsheets and on-line technical information
- managing an easily accessible central knowledge database for the facilitators to record and share the details of businesses and materials involved in the program
- supporting marketing and communications activities to educate and recruit businesses and disseminate the outcomes of successful projects
- the EPA may also consider funding for trials and equipment rebates.

The EPA wishes to encourage innovative industrial ecology and recognises that failure is the risk of innovation. In order to manage the risk that industrial ecology projects may be initiated that are unable to deliver the desired outcomes or come to fruition within the timeframe of the grant, the EPA is appointing a Circulate, NSW EPA Industrial Ecology Steering Committee and establishing a robust system of monitoring and evaluation for the program.

The role of the steering committee is to provide advice to the EPA on the running of the program, consider all program applications for grants and provide their assessment to the EPA of individual projects. The steering committee will have five members and will include two NSW EPA staff, this will also ensure full consideration is given to NSW environmental regulations.

#### Circulate, NSW EPA Industrial Ecology: Information for Applicants

Figure 2 – Circulate, NSW EPA Industrial Ecology Program and Project Structure (example)



## 3. Circulate facilitators

Any business or not-for-profit organisation holding an ABN may apply for grants for facilitators under Circulate, NSW EPA Industrial Ecology. A person must be nominated to act as the facilitator for each program application made; a separate grant application is required for each program consisting of a region and targeted resource stream. While the EPA will provide ongoing technical support to each grantee; the success of this program depends largely on the skills and enthusiasm of the facilitators.

The program requires facilitators with the skills to actively assist engaged businesses to divert resources from landfill and fulfil the program responsibilities. They are expected to inspire businesses and be able to lead a support team. They will have an excellent understanding of local business connections and industrial ecology opportunities. They will have to be comfortable as the key presenter in front of a large audience, conduct small group meetings as well as one-on-one sessions with senior business leaders. The facilitator will have to ensure that project and contact information is recorded in the Circulate knowledge base.

The role of the facilitator is to:

- actively engage with businesses in their region to divert resources and recruit them using workshops, business matching events and direct communication activities
- identify local businesses that generate potential resources and those that can locally use, transport or even modify the resource to make it more useful
- fully support engaged businesses to apply industrial ecology principles
- develop and submit project plans to the EPA for approval that identify clear, measurable targets
- advise and support participating businesses as they plan and implement industrial ecology projects
- coordinate and facilitate the dialogue between the business generating the resource material, those that could transport the material and those that will use the material
- facilitate the dialogue between all participating businesses and any government consent authorities (e.g. EPA waste regulation, Department of Planning)
- identify and engage with external specialist advisors where necessary
- share information and opportunities, and work co-operatively with the other facilitators and the EPA, to contribute to the development and success of the Circulate network
- keep the EPA Circulate knowledge base program up to date with information on businesses and progress on all projects
- make the EPA aware of any developments that may adversely affect project progress in the region in a timely manner.

Further information on the key responsibilities of the facilitators are shown in Appendix A.

Applications will be assessed on a competitive basis against the following selection criteria for facilitators, as well as the region and the resource stream criteria for the proposed programs:

- 1. suitability of the facilitator for the role
- 2. track record of good management and capability to manage grant funding
- 3. ability to recruit businesses
- 4. ability to prepare proposals, assess quality of project proposals and manage risks
- 5. suitability of support team (including nominated contractors if applicable)
- 6. access to expertise to support project approval and quality of support

To be considered suitable, the facilitator should demonstrate that they and their supporting team have the following skills, knowledge and characteristics:

- an ability to judge the commercial viability of opportunities and proposals
- superior communication and facilitation skills including demonstrated ability to comprehend and explain technical waste matters, public speaking and meeting/workshop facilitation
- practical experience and understanding of the business of industrial ecology, the reuse and recycling of materials, current and developing equipment and technologies and a knowledge of local material supply and reuse opportunities
- strong business planning, time and project management skills
- strong drive and initiative in project delivery
- an ability to work with multiple stakeholders and balance multiple priorities
- an ability to relate to and work with all levels within a business, from production floor to management and board
- supply chain management and logistics
- process control and optimisation
- strong computer skills including Microsoft Office and the ability to master the provided database application
- established business networks in prominent industry sector(s) in the region appropriate to the program proposal
- an ability to prepare project plans which demonstrate a business and environmental benefit to the EPA
- an understanding of the EPA environment regulations, including licensing and State Government planning requirements
- an ability to organise, host, record and report the results of local networking meeting, and business visits
- a track record of successfully marketing new concepts to business and engaging in new business activities
- legal understanding of agreements for collaborative projects
- event administration, marketing, communications and database administration
- evidence through references of an understanding of local waste recovery operations and having worked with businesses within the proposed region

To be considered applicants must demonstrate that facilitators:

- have appropriate levels of insurance including Professional Indemnity insurance
- are committed to providing the required amount of facilitator's time to the project
- will attend a minimum of six workshops over the two year period
- agree to allow all content prepared as part of the facilitator role to be audited by an EPA appointed auditor
- agree to allow all content prepared as part of the facilitator role to be included in events and publications prepared by EPA or its contractors
- agree to fully support and use the Circulate, NSW EPA Industrial Ecology knowledge database and input information on project progress
- agree to acknowledge Circulate, NSW EPA Industrial Ecology where appropriate

## 4. Circulate regions

Industrial ecology programs operate at precinct, local or regional scales due to the costs involved in transporting relatively low value materials. In recognition of this, Circulate, NSW EPA Industrial Ecology facilitators will operate within specific geographically defined regions from which the identified waste stream will be sourced. Facilitators should interact with one another on opportunities that cross regional borders. It is expected that regions with smaller populations and lower levels of commercial and industrial activity will achieve relatively smaller outcomes with commensurately lower levels of grant funding and time allocated.

The Circulate, NSW EPA Industrial Ecology Regions are shown below; also see Appendix B for a map showing areas covered by regions. Appendix C also shows Sydney Metropolitan area map for clarity:

Region	Area covered
Sydney	Metropolitan area
Hunter	Central Coast, Newcastle, Hunter
South East	Wollongong, South East, South Coast
Inland NSW	Central West, North West, Northern
Murray	Murray, Murrumbidgee
North Coast	Mid North Coast, Richmond Tweed

Table 1 Circulate, NSW EPA Industrial Ecology Regions

In some regions there is a larger volume of material available that is currently going to landfill and in others there are large travel distances involved in servicing that region. The EPA may therefore decide to appoint more than one facilitator in a region. As each program application must nominate a facilitator, a region and a target resource stream, it is unlikely that the EPA will appoint more than one facilitator in a region whose programs are targeting the same resource stream. Should a suitable application for a region not be received, the EPA may decide not to award a grant under the program in that region.

### 5. Circulate resource streams

Each program application must nominate a targeted resource stream and projected tonnes of that resource diverted over the two years of the grant funding, tonnes projected per annum thereafter. It is appreciated that material densities are much lower when targeting the recovery of some resource streams over others, for example plastic based resources as compared to the recovery of food organics or timber. The Circulate, NSW EPA Industrial Ecology program has been designed to target the diversion of as much waste material by weight from landfill as possible. However, in order to recognise the potential for recovery of lighter resource streams, other positive values and benefits of diversion from landfill are considered by the program.

Target resource streams for program applications must contain projections for:

- program tonnes diverted over the two years of the program
- tonnes pa diverted per annum thereafter
- business cost savings an economic case for the recovery of the waste stream
- CO2<sup>e</sup> greenhouse gas abatement by amount of overall carbon dioxide equivalence
- energy conservation by megajoules (MJ)
- water conservation by kilolitres (KL) of water saved
- **landfill space savings** by cubic metres (m<sup>3</sup>)
- **jobs** number of full time equivalent (FTE) employment opportunities created or preserved.

To calculate the figures for carbon dioxide equivalence, energy conservation, water conservation and landfill space savings from the projected resource stream tonnages, applicants must use the <u>EPA 'Recyculator' tool</u>. The Recyculator is an interactive tool that calculates the environmental benefits of large scale recycling initiatives across 21 material types in NSW. It estimates the full environmental benefits of recycling to help communicate these benefits.

If the proposed resource stream is not available in the Recyculator tool then the applicant may demonstrate estimates for these values using calculations based on evidence from reliable sources. This will be assessed at the discretion of the EPA with advice from the steering committee.

You will see that many resource streams identified in the above *Figure 1: Composition* of *NSW C&I Waste including content of garbage bags* (from the 2013–14 EPA Audit of C&I Waste) are lightweight materials such as plastics. To encourage recovery of these resource streams, the EPA will assess the applications using the projected tonnes to be achieved in the region as well as giving consideration to the other factors above when evaluating and comparing the applications against one another but tonnage and commercial value will be the principal objectives. This will ensure that the program meets and contributes to the aims of the Waste Less Recycle More initiative and directly diverts waste from one or more New South Wales licensed landfills.

Applicants would be advised to review the Commercial and Industrial Waste Survey: Regulated Areas of NSW 2014, in preparing their applications in order to identify viable resource streams in regional areas as well as potential industry sectors which may be focussed upon to deliver those resources. These audits can be found here:

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- Disposal-based audit Commercial and industrial waste stream in the regulated areas
  of NSW
- Pilot generator site-based audit Commercial and industrial waste stream in the Metropolitan Levy Area

The EPA and steering committee may also give some consideration to programs where a resource stream that is already being diverted from landfill is able to be progressed to an alternate and higher value resource use based on the waste hierarchy as shown in Figure 3.

#### Figure 3 - The waste hierarchy



Suggested minimum outcomes for total resource diversion sought for the two years of the program for each region are provided as a guide in Table 2 below. The tonnages, numbers of projects and cost per tonne are for all the resource streams targeted by all facilitators in the given region. The indicative cost per tonne is based on the Round 1 results extrapolated over the two year period 2014–2016.

Region	Number of projects in discussion	Number of projects completed	Tonnes diverted from landfill	Indicative cost per tonne
Sydney	100	25	14,000	~20
Hunter	100	20	8,000	~10
South East	100	20	8,000	~15
Inland NSW	30	10	5,000	~15
Murray	30	10	5,000	~20
North Coast	20	10	3,000	~20
Total	400	95	43,000	~16 (note average)

Table 2Suggested outcomes for each region

## 6. Circulate project management

Once a facilitator has had their program approved they will begin to develop their projects. In order to encourage innovative industrial ecology projects, the EPA has designed the program to be as flexible and adaptable as possible in the identification of opportunities and the recording of progress. It is important for both the facilitators and the EPA to use monitoring and evaluation measures for determining program achievements over the period of the grant. Table 3 below shows the metrics for that measurement, as a framework of project business engagement stages to be used in project plans.

The EPA has created a template project plan facilitators must submit as they commence working through the project business engagement stages. Project plans need to be created and written up during the late discussion and early negotiation stage; that is before a significant amount of work and time is committed to them. It is expected that facilitators spend no more than 10 hours on a potential project before they are submitted to the EPA for review. The steering committee will consider project plans submitted by facilitators and meet regularly to discuss the progress of the programs for the duration of the grant period.

A project plan identifies the business from whom an identified resource is generated and will be diverted, that the facilitator has been actively engaged with in their region. The quantity and type of resource will be accurately defined and the other businesses that have been recruited, or that need to be recruited, for the diversion of the resource will be identified. This could be those businesses that can locally use the resource, transport it or even modify the resource to make it more useful.

Although failure is the risk of innovation, projects must start to deliver industrial ecology and be shown to be progressing through the project business engagement stages outlined below, to the satisfaction of the EPA, with advice from the steering committee, within three months of commencement.

Businesses being assisted by facilitators under the Circulate program projects must:

- commit to reporting to the EPA verifiable resource flow data every six months for a minimum of three years
- permit an EPA appointed auditor to review project outcomes on request
- permit the EPA to publish a case study on the project on request
- acknowledge the contribution of the EPA Circulate program.

Facilitators are required to prepare and submit with their program application, **one** new (not yet commenced) industrial ecology project plan (using the template provided) based on an identified opportunity.

Stage	Description	How measured
Idea	Initial connection between at least 2 parties, which has opportunity to lead to an exchange of resource(s) (one party with a 'have', and the party with a matching 'want'). A 3rd party may be required to transport and or process the resource.	Number entered into knowledge base.
Discussion	Parties engaged in discussing the commercial and legal terms for doing business with each other to implement the synergy/project.	Number progressing to this stage in the knowledge base.
Negotiation	Parties progressed to discuss the commercial and legal terms for doing business with each other to implement the synergy/project.	Number progressing to this stage in the knowledge base.
Implementation	Negotiation complete and agreement reached with an agreed starting date for exchange of material.	Number progressing to this stage in the knowledge base
Completion	The terms of the contract have been fulfilled, the synergy/project has been implemented (the initial tranche of a continuous exchange or a one-off exchange).	Number progressing to this stage in the knowledge base.
Completed	All facilitator preparation and negotiation satisfactorily completed work has been completed. The case study forms have been developed and returned as evidence base for impact (economic and environmental) and attribution. All data entries associated with the synergy are complete within the database.	Number progressing to this stage in the knowledge base.
Program tonnes	Quantity in tonnes of resource diverted from landfill attributable to the project <b>as measured</b> in May 2016, Dec 2016 and May 2017.	Direct resource diversion from landfill as reported by each facilitator and independently verified by the EPA-appointed auditor.
Business Cost Savings	Estimated economic advantage for the businesses involved created by the project.	Amount of money saved by business through managing the resource differently as a result of the project.

# Table 3Circulate project business engagement stages and monitoring and<br/>evaluation measures

## 7. Amount and conditions of funding

In this second round of grants of between \$80,000 and \$500,000 are available and funding will be awarded on the basis of value for money for the EPA based upon assessment of the values associated with projected target resource streams. An indication of suggested minimum number of tonnes the EPA is expecting to be targeted in each region is given in Table 2 above. Funding is available based on applicants nominating for each region and proposals which appear to be capable of achieving these minimum outcomes

Applicants successful in securing funding will need to sign a funding agreement, which will be issued with their letter of offer. Successful funding recipients must ensure that the NSW Government's contribution is acknowledged with a statement in any written material in relation to the project being funded and that the NSW EPA logo be used in accordance with the <u>style guide</u>. The EPA should be invited to attend and present at any launch or public events associated with this funding.

Submission of a final report is a condition of this funding. Successful applicants will be sent a reporting template which will need to be completed and assessed as satisfactory before final payment is issued.

Note that there may be a further round of grant funding after this current program finishes in 30 June 2017.

Should a facilitator in a region be found to not be fulfilling the requirements of the program, then the EPA, in consultation with the steering committee, may terminate the grant for that program. This may include failure to deliver or show progress with the program over a period of three months or failure to demonstrate the skills listed as a requirement of the grant.

## 8. Application guidance

Your application should address all of the criteria outlined above using the application form in Appendix D. Here is some additional guidance to assist with your application.

- 1. Acknowledge and agree to the grant program requirements for eligibility.
- 2. Include a brief summary describing your business:
  - your existing business activities and services
  - the previous involvement of your business in industrial ecology
  - the strategic advantages your business offers as facilitator of an industrial ecology network.
- 3. Details of the qualifications and skills of the facilitator and each member of the support team.
- 4. Carefully examine the suggested outcomes for each region and the program measures and outcomes; with attention to how they will be measured. Applicants must propose outcomes that will show how they will contribute to the suggested outcomes. Applicants who nominate outcomes that appear considerably greater than suggested will need to make a strong case for how they will be delivered.
- The EPA is seeking a relatively equitable distribution of funding amongst the regions, taking into the consideration the level of commercial and industrial activity in each region. Proposed outcomes and total funding sought should be balanced to ensure outcomes will be delivered.
- 6. Ensure you have a full understanding of the program requirements for each of the steps outlined in Appendix A.
- 7. Submit with the application an industrial ecology project plan for a project based on an opportunity for the program.
- 8. Your proposal will compete with those of other organisations; so practical experience in implementing industrial ecology principals along with value for money are important.
- 9. Programs will be checked by an independent auditor for quality and integrity in accordance with the EPA's risk management process. An EPA staff member will be available and entitled to be present in assessments throughout the program.

# 9. Timeline

Circulate Program Round 2, key events	Key Activities (FY 2015-2016)*
EPA Workshop for prospective applicants	Friday 21 August 2015
Deadline for submission of applications	5 pm Friday 11 September 2015
Successful applicants notified	Late September 2015
1 <sup>st</sup> grant payment	September 2015
Combined facilitator networking event (Parramatta)	Late October 2015
Submit 2 <sup>nd</sup> Project plan	1 October 2015
2 <sup>nd</sup> grant payment on satisfactory progress against targets	Mid December 2015
Combined facilitator networking event (regional location)	Mid February 2016
Combined facilitator networking event	Early May 2016
3 <sup>rd</sup> grant payment on satisfactory progress against targets	Mid May 2016

	Key Activities (FY 2016-2017)	
Combined facilitator networking event	End July 2016	
4 <sup>th</sup> grant payment on satisfactory progress against targets	Mid August 2016	
Combined facilitator networking event (regional location)	End October 2016	
5 <sup>th</sup> grant payment on satisfactory progress against targets	Mid November 2016	
Combined facilitator networking event (regional location)	Mid February 2017	
Combined facilitator networking event	Mid April 2017	
Final report and program review complete	Early May 2017	
6 <sup>th</sup> grant payment on satisfactory progress against targets	Mid May 2017	
Combined facilitator networking event	June 2017	

\* These dates may be altered by the EPA as necessary

## Appendix A Circulate roadmap

Ultimate outcome: Ongoing material exchange between businesses

Steps	Idea	Discussion	Negotiation	Implementation	Completion	Completed
Facilitator role	Provide opportunities for initial connection between businesses with similar wastes. Identify and facilitate discussion with and possible users of this waste. Identify companies that can transport or if necessary transform this waste into a form that is more easily used. Document discussion and progress into the Circulate database.	Progress the discussion by co- ordinating and driving interested parties. Incorporate potential partners that can add to the viability of the exchange in terms of increased material to add to the exchange, reduced cost of transport and or reprocessing. Submit a developed project plan to the EPA. Document discussion and progress into the Circulate database. Record the number of tonnes involved.	Receive acceptance of the project plan from the EPA. Progress discussion so that all parties have agreed on commercial and legal terms for doing business with each other. Check that there is no EPA regulatory issue with regard to the exchange taking place. Check with staff on the 'shop floor' that they understand their role and are happy with participating in the exchange. Document progress in Circulate database and update the tonnes involved.	Conduct initial exchange. Check that all parties are satisfied with how the exchange went. Were there any problems with the first exchange that should be corrected? Make sure that the exchange takes place again and is likely to continue smoothly. How are the other regions doing this same or similar exchange? Consult the Circulate database. Document progress in the Circulate database.	Are all stakeholders still satisfied with the exchange? Is this exchange going to continue smoothly? How could the exchange be enhanced? Are there other companies that can benefit from this exchange? How are other regions doing this same or similar exchange? How can other regions benefit from this change? Document progress in the Circulate database.	The exchange is now standard practice for the businesses involved. Write up a case study, with involvement and permission from the businesses involved, highlighting the benefits of the exchange. Look for further opportunities to promote the benefits of this exchange and the Circulate program. Continue to report progress in the Circulate database and update the number of tonnes involved.

Steps	Idea	Discussion	Negotiation	Implementation	Completion	Completed
Resources	EPA website Circulate IE database Regional Networking events Circulate Facilitator meetings	EPA and other IE websites e-news published Circulate database Regional Circulate Networking events Circulate Facilitator meetings	EPA and other IE websites EPA Grant administrator Circulate database	EPA regulation website EPA Grant administrator Circulate database Regional Circular Networking events Circulate newsletter	EPA regulation website EPA Grant administrator Circulate database Circulate newsletter	Circulate database Circulate newsletter Facilitator meetings

Circulate, NSW EPA Industrial Ecology: Information for Applicants

### Appendix B Map of NSW regional areas



# Appendix C Map of Sydney metropolitan areas

