



BAYSWATER ECO INDUSTRY

PRECINCT 2 - REGENERATION PLAN



URBAN REGENERATION
STUDENT PROJECT

**'Bayswater Industrial
Area Regeneration'**

 Curtin University

SCHOOL OF DESIGN AND
THE BUILT ENVIRONMENT | SEMESTER
ONE 2019

UNIT | Urban Regeneration
(Urban and Regional Planning Course)

UNIT COORDINATOR | Dr Courtney Babb

REGENERATION STRATEGIES

The Bayswater Eco-Industry is the regeneration strategy for Precinct 2 of the Bayswater Industrial Area (BIA). The strategy focuses on sustainable and green industrial uses, resulting in the creation of a niche, modern cluster of much-needed renewable and sustainable focused business operations. Five strategies are outlined in this plan, along with their associated sub-strategies, to ensure the outcome of this regeneration project will be economically, culturally, and environmentally viable to the BIA. These sub-strategies are Adaptive Reuse, Streetscape Design, Security, Sustainable Practice and Living Stream Formation.

1. ADAPTIVE REUSE

Sub-Strategy	Execution	Management
1 Warehouse Refurbishment	<ul style="list-style-type: none">The re-use and refurbishment of existing infrastructure to maintain amenity and sense of place for the subject site.	<ul style="list-style-type: none">The CoB to subsidise rates for redevelopments that retains the majority of existing infrastructure and street facade.Amending TPS24 to incorporate a % of existing materials to be used in the redevelopment of sites.
2 Recycled Existing Materials	<ul style="list-style-type: none">The incorporation of underutilized materials from existing uses in the subject site as a valuable resource for future infrastructure development.	<ul style="list-style-type: none">The CoB to subsidise standard rates for businesses that can prove they utilized previously underutilized materials for development and/or refurbishment.Waste deemed 'reusable' by the city of bayswater through waste disposal can add against the rate deductions, encouraging the reuse of, or sustainable waste disposal, of materials.
3 Better Design Outcomes	<ul style="list-style-type: none">Where new infrastructure is required, sustainable and culturally appropriate design outcomes is required.	<ul style="list-style-type: none">Updating TPS24 with new building guidelines, requiring new development to incorporate sustainability of locally appropriate design.



REGENERATION STRATEGIES

STAGE 1

Stage 1 involves the implementation of a sustainable-practice education centre by year 2020. It would be established through a Public-Private Partnership (PPP) between the City of Bayswater and interested sustainability partners. The PPP approach establishes this regeneration process as being in between the bottom-up (grassroots) and top-down (authoritative) methods. The sustainable-practice education centre aims to teach interested visitors, such as school-groups, business managers or property owners, about low-carbon and green methods. Located centrally in the subarea in an existing adapted warehouse, the front verge contains native, low-maintenance gardens and a bus stop bay to facilitate groups visiting the centre. There is also an onsite café that is open to the public. The education centre contains an eco-living showroom, that emulates a sustainable house, including a small outdoor area. There is an scientific activity area, for visitors to learn about how sustainable practices and renewable energy work, as well as a theatre/seminar room for presentations.

- Catalyst (Eco Education Centre)
- Good Quality Existing
- Poor Quality Existing
- Existing Mix-use



2. STREETScape DESIGN

Sub-Strategy	Execution	Management
1 Vegetation and Tree Cover	<ul style="list-style-type: none">Offer rate concessions for lots where remnant trees are maintained or where vegetation and trees are planted and maintained on site.Implementing rain gardens on verge space.	<ul style="list-style-type: none">Fines for any lots that do not comply.Design strategy for best Water Sensitive Urban Design verge.
2 Street Signage	<ul style="list-style-type: none">Implementation of design strategy to uphold the quality of current high quality street signage and ensure all future street signage is effectuated to utmost quality.	<ul style="list-style-type: none">CoB to inspect all street signage on a regular basis.
3 Traffic Calming	<ul style="list-style-type: none">Implementation of street parking to slow traffic.Implementing Chicanes on Catalyst street to improve amenity and slow speeds.	<ul style="list-style-type: none">Local Governments enforcing speed limit and enforcing design guidelines for streetscape.

3. SECURITY

Sub-Strategy	Execution	Management
1 Semi-Permeable fencing	<ul style="list-style-type: none">As per TPS24 regulations and R-Codes, to provide passive surveillance through CPTED principles	<ul style="list-style-type: none">Deemed to comply through Development Application process and monitored through business-as-usual local government compliance checks
2 Street lighting	<ul style="list-style-type: none">CoB to review budget in new FY and ensure appropriate spend for adequate lighting in areas that need attention	<ul style="list-style-type: none">CoB to monitor and maintain through business-as-usual compliance checks and maintenance issues reported by members of public
3 Security Patrols	<ul style="list-style-type: none">Implementation of a LPP that designates the industrial area and requires a levy to be paid for businesses operating in local area that enables security patrols in the area	<ul style="list-style-type: none">CoB to enforce speed limits and enforce design guidelines for streetscape.

STAGE 2

Stage 2 involves the adoption of sustainability policies by Council, incentives for industrial business operations and incremental upgrades to the wider environment undertaken by the City of Bayswater. Adoption of best practice sustainability policies is aimed to be achieved by 2030, under assumptions that the City of Bayswater continues to operate to its current progressive environmental positions. Concurrently, there would be incentives for businesses to undertake more sustainable practices, examples of which are discussed in the tables above/below. This would coincide with the business owners/managers/stakeholders utilising the core sustainability education centre. The City would gradually work on strategic projects over the following years, including improvements to streetscape design and the retrofitting of the existing drainage area into a living stream.

- New Eco Industries
- Existing Tree Cover
- New Trees
- Bus Stop



4. SUSTAINABLE PRACTICE

Sub-Strategy	Execution	Management
1 Renewable energy	<ul style="list-style-type: none">Offer rate concessions for businesses utilising renewable energy (e.g. solar) and educating themselves by visiting the 'catalyst' education centre.	<ul style="list-style-type: none">CoB to offer rate concessions. Lower cost to business in long-term due to reduced electricity prices.
2 Sustainable waste management	<ul style="list-style-type: none">Offer rate concessions for businesses utilising sustainable waste management systems (e.g. greywater irrigation) and educating themselves by visiting the 'catalyst' education centre.	<ul style="list-style-type: none">CoB to offer rate concessions. Lower cost to business in long-term due to reduced water consumption prices. Businesses cooperating to manage waste and reduce pollution by sharing resources.
3 Local recycling of materials	<ul style="list-style-type: none">Offer rate concessions for businesses using local recycling businesses, which are prevalent in the area.	<ul style="list-style-type: none">Removal of external companies visiting the area to collect recyclable waste frees up road space and reduces traffic, which results in less maintenance required to be undertaken by the City.

5. LIVING STREAM

Sub-Strategy	Execution	Management
1 Replanting	<ul style="list-style-type: none">Removal/turnover of current invasive grasses to native nutrient-absorbing plants. Providing stormwater filtration services whilst continuing the CoB Urban forest.	<ul style="list-style-type: none">Complete removal of invasive grasses and weeds from the Clavering Road storm water stream by 2021, and the planting of native flora.Amending the CoB Urban Forest Strategy to include living stream construction and management.
2 Filtration	<ul style="list-style-type: none">Lowering the slope gradient feeding into the present stream, increasing surface area for stormwater and slowing down run-off. This allows peak filtration and absorptionInstallation of gravel and rocks instead of present soils, reducing groundwater absorption of pollutants	<ul style="list-style-type: none">Resurfacing the Clavering Road stormwater stream to maximise filtration before entering the open water stream. The amendment of the urban forest strategy to include living stream construction and management.
3 Gross pollutant trap	<ul style="list-style-type: none">Installation of gross pollutant traps along stormwater entrances into the Clavering Road stormwater stream to prevent large and unwanted pollutants entering the waterways and eventually the Swan River.	<ul style="list-style-type: none">The cleaning and removal of waste from the traps fortnightly, to then be recycled.The creation of a localised water management plan in collaboration with Water Corp and Department of Environmental Regulation, rather than specific water location frameworks.

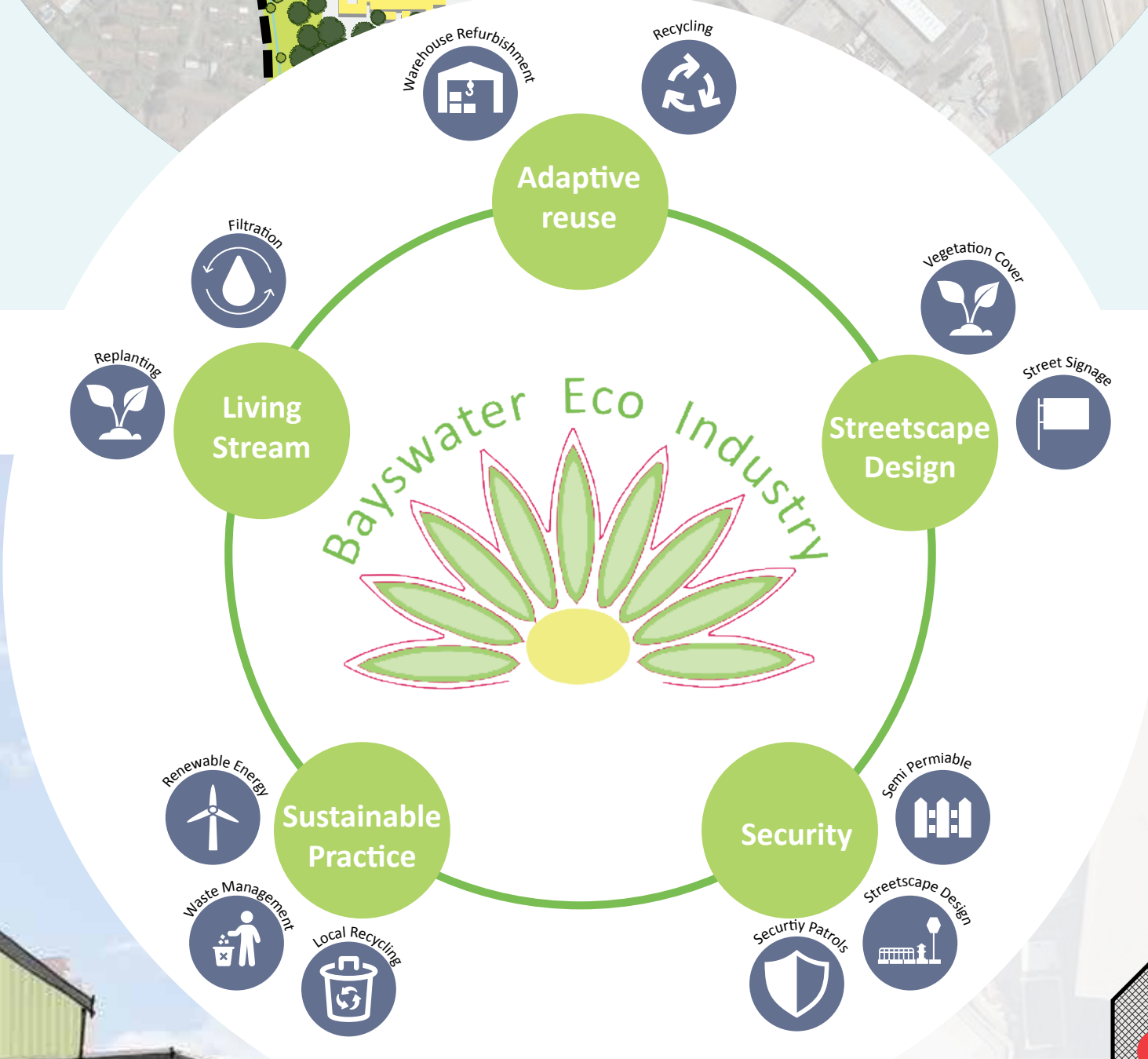
STAGE 3

Stage 3 will see the Bayswater Eco-Industry fully established, with the objectives of the master-plan completed by 2050. The target year may be subject to the environmental progress of higher authorities than the local government, however it will be assumed that low-carbon, green and sustainable industries will have a stronger focus in the coming decades. By this target year, all industries operating within the Bayswater Industrial Area are deemed-to-comply with sustainable practices that are outlined in future Local Planning Schemes/Policies, thus fulfilling the Eco-Industry designation. The completed overall vision will have cleaner and neater streetscapes, with footpaths both sides of the roads and clear signage and road marking. Additional planting has will have been undertaken along the living stream, as well as extensive increases to the street tree coverage, as per the City of Bayswater's Urban Forest Strategy goals. John St and Munt St, identified as the main streets in the area, host a number of bus stops for improved accessibility to the site. Traffic calming has been undertaken on Wright St, which was identified as a hotspot for speeding vehicles. There will also be further investigation into traffic calming on Munt, Jon and Irvine streets.

- Traffic Calming
- New Street Lighting



CATALYST INTERPRETATION



CATALYST FLOOR PLAN

