

# NSW Circular Economy Policy

## RESPONSE

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## ABOUT OPEN CITIES

**Open Cities** is a peak association representing infrastructure and service providers, councils and research organisations working together to transition Australian communities to a more sustainable, resilient and affordable energy, water, digital and mobility future. We are working with government and industry to modernise and rethink policy, legislation, regulation and price settings to enable Next-Gen precinct-scale utility and mobility services and solutions that promote the Circular Economy (CE). Our purpose is to accelerate the take-up of sustainable utility and mobility innovation and services by:

- promoting and enabling evidence-based policy and regulation
- highlighting best practice projects driving economic growth and social benefit
- driving greater awareness of the rights of prosumers

This submission is made by Open Cities and represents the views of our members.

Make the transition now to sustainable, more resilient and affordable communities giving people more choice, less cost and greater sustainability.

## EXECUTIVE SUMMARY

Open Cities Alliance welcomes the opportunity to respond to the NSW Circular Economy (CE) policy. We commend the NSW Environmental Protection Authority (EPA) for its national leadership on this critical policy platform and look forward to working together across government and agencies to establish a policy and economic framework for the NSW CE.

Open Cities is a new national peak association for Next-Gen infrastructure and services. We are working with our industry and council members to create policy and market setting that transition Australia's utility and mobility sectors to the future: away from costly centralised linear solutions towards precinct-scale prosumer markets.

Australians are missing out on the many benefits enabled by the technological and digital revolution, including cheaper products and services. New precinct-scale water, energy, waste, mobility businesses and services are putting downward pressure on utility bills and enabling the democratisation of infrastructure. They are also stimulating a new category of consumers - **prosumers: who can both produce and consume**. By recycling their waste and water, generating free energy from the sun and selling it back to the grid people can reduce utility costs and gain control. Prosumer benefits also apply to mobility: by sharing mobility services, people can save on the second biggest household expense of a car. These new utility/mobility models are also driving sustainability and carbon reduction.

Unfortunately, State policies, legislation, regulation and tariff structures promote existing centralised utilities at the expense of Next-Gen water, energy, waste and mobility infrastructure and services. Unlevel playing fields make it challenging for new circular business models to grow their services and share the benefits. For example, centralised utilities have statutory obligations to serve all future growth and are able to use their monopolies to shut out innovation if they choose. Compounding matters is the fact regulators struggle to value reuse and sharing which further entrenches centralised solutions. An example of this is the Independent Pricing and Regulatory Tribunal's (IPART) retail-minus pricing approach to wholesale water, has driven up the price of recycled water operations by 400 - 1200 percent<sup>1</sup>.

The same issues face Next-Gen energy. Local renewable energy generators cannot share the benefits with their neighbours without paying unviable networks fees and charges. This is preventing innovation and its benefits of sustainability, decarbonisation, self-sufficiency, liveability, and preventing families and businesses from paying cheaper utility bills.

NSW cannot grow sustainably taking the same approach to utility and mobility infrastructure and services it has taken for the past 75 to 100 years. Like waste, transitioning to 21st century infrastructure solutions and services is now urgent and essential and circular economics provides the framework for this transition.

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1 <https://www.ipart.nsw.gov.au/Home/Industries/Water/Reviews/Metro-Pricing/Wholesale-pricing-for-Sydney-Water-and-Hunter-Water>

# RECOMMENDATIONS

Open Cities makes the following recommendations:

## 1. NSW Treasury/ economic agencies participate in NSW Circular Economy policy

The economic benefits for NSW to participate in the CE are huge. In the EU they are estimated at EU1.8 trillion (\$AUD2.9 trillion)<sup>2</sup>. In China, businesses and households could save CNY70 trillion (\$AUD13.77 trillion) or 16 percent of China's projected GDP by 2040<sup>3</sup> by participating in the CE.

Critically the CE provides opportunities to deliver more affordable goods and services, the democratisation of our infrastructure and services and more inclusion and equity for the vulnerable and indigenous Australians. This is on top of the obvious and significant carbon reductions and protection of our biodiversity currently being decimated by consumption.

The policy needs to be intergovernmental, cross sector and include industry. It needs to identify, promote and cultivate collaborative pan-industry opportunities.

Limiting the NSW CE policy to the waste sector will unnecessarily limit our continuous improvements in resource productivity and stymy growth, competitiveness, wealth and renewal. It also ignores the significant benefits of Next-Gen business models that embrace reuse and sharing over linear solutions and offer new competitiveness and value alongside sustainability.

Current market settings are shutting out Next-Gen infrastructure and services, blocking urgently needed change and preventing a transition to a circular future. The leadership of NSW Treasury and Finance will be required to tackle these broader market and economic issues, including the creation of level playfields for new business models and the removal of barriers.

The Queensland Government offers a best practice approach for a whole-of-government response. Here Queensland Treasury Corporation is leading the policy thinking supported by the Department of Environment and Science, mobilising and lobbying for change across Government. Loop Circular Economy Platform has assisted in this process<sup>4</sup>.

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2 <https://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/europes-circular-economy-opportunity>

3 <https://www.ellenmacarthurfoundation.org/news/new-report-highlights-opportunity-for-chinas-cities-to-lead-global-circular-economy-transition>

4 Loop Circular Economy Platform is a not-for-profit that instigates change toward a circular economy in Australia. Loop is heavily invested in building improving capacity on circular economy across Australia through their Circular Economy Training and Demonstration Centre, Powering the change to a circular economy conference and integrating circular approaches into tertiary education with the University of Adelaide. [www.loopplatform.org](http://www.loopplatform.org)

Open Cities recommends the following for consideration:

- 1.1. The policy needs to be intergovernmental, cross sector and include industry to identify, promote and cultivate collaborative pan-industry opportunities.
- 1.2. Ensure NSW Treasury & Finance along with economic agencies participate in setting the policy framework for the NSW Circular Economy.
- 1.3. The policy needs to recognise the intrinsic links between CE and Australia's indigenous economies and communities and consider the opportunities for reconciliation and enablement of the indigenous communities.
- 1.4. NSW Government work with Open Cities members to prepare a study into the value of the Circular Economy to NSW.
- 1.5. NSW Government work with Open Cities to Identify and remove regulatory and market barriers to CE business models.

## 2. Expanding the scope & measurement to include mobility, water & energy

The scope of the NSW CE policy should be expanded beyond waste to include *food, the built environment, construction, mobility and utilities (water & energy)*.

Technological advancements are disrupting the utility and mobility sectors radically changing consumer behaviours. For example, people are now becoming prosumers: *producers and consumers*, generating income from producing and selling their renewably sourced energy or recycled water, from sharing their vehicles and data.

Along with electric and autonomous vehicles, shared mobility is a critical pillar addressing an excess of privately-owned vehicles congesting infrastructure.

Shared mobility and digital networks also support the CE and the rise of prosumers. Car-sharing, autonomous vehicles, electrification of vehicles and more superior materials are reducing customer costs. For example, in the EU the average cost per car/ kilometre is projected to drop by 75 percent. Technological advancements could improve agricultural efficiencies by up to 30 percent and reduce machinery costs also by 75 percent, reduce construction costs by 50 percent. While passive house design improvements are anticipated to drive a 90 percent reduction in energy costs.<sup>5</sup>

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<sup>5</sup> <https://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/europes-circular-economy-opportunity>

Planning for new self-sufficient communities into 2056, will need to enable and reflect these Next-Gen customer services and business models. An 'open city' planning lens will ensure homes and businesses are future-proofed and put downward pressure on utility and mobility pricing.

It is essential this transformational policy is not just a reaction to another country's waste policy. What would happen if China reversed its waste policy decision? There needs to be deeper systems thinking across NSW Government policy including utility and mobility infrastructure and services.

The policy also needs to consider how we get attributable measures for Circularity. Measurement of CE is essential to not only catalyse demand and demonstrate value but importantly, to ensure action. Industry and all stakeholders should be part of measurement standards.

Open Cities recommends the following for consideration:

- 2.1. Expand the scope of the NSW Circular Economy to include food, built environment, construction, mobility, water & energy
- 2.2. Work with industry / stakeholders on attributable measurement standards for CE

### 3. Establish an industry working group to co-design & implement policy

Open Cities would like to promote collaborative policy development with industry, research organisations, councils and the NSW Government to develop the NSW CE policy.

Government can benefit from the early engagement of industry and business, assisting them in meaningful participation and implementation readiness. For example, the London Waste & Recycling Board (LWARB) developed their strategy hand in hand with industries ensuring that when the strategy was released industry businesses had already signed up to the reforms<sup>6</sup>.

In addition, Open Cities highlights the need for an ecosystem stakeholder map in order to promote CE across multiple policy areas and stakeholder groups within government and industry.

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6 London Waste and Recycling Board (2015), Towards a circular economy – context and opportunities; Available at: [http://www.lwarb.gov.uk/wp-content/uploads/2015/12/LWARB-circular-economy-report\\_web\\_09.12.15.pdf](http://www.lwarb.gov.uk/wp-content/uploads/2015/12/LWARB-circular-economy-report_web_09.12.15.pdf) (Accessed 8 March 2017).

Significant awareness raising is required to ensure CE is integrated into the agenda of infrastructure advocacy, city advocacy, regulators, consumers /prosumers, business and all stakeholders. The development of CE playbooks will assist stakeholders to realise the benefits and value and make progress towards implementation. Playbooks also assist in the spreading of key messages while explaining often complex concepts. For example, the World Circular Economy Forum 2018 (WCEF2018) has developed playbooks for different industries and sectors.<sup>7</sup>

Open Cities recommends the following for consideration:

- 3.1. Establish an industry working group to co-design policy
- 3.2. Develop an eco-system stakeholder map
- 3.3. Prioritise awareness-raising through activities consultation steps
- 3.4. Develop CE playbooks for industry and stakeholders

#### 4. NSW host the World Circular Economic Forum 2021 (WCEF2021)

Finland, Japan and Canada will have hosted the first four WCEFs. NSW has a unique opportunity to be an Australian and global leader by hosting this forum in 2021. This year WCEF attracted 1,000 delegates, 500 companies from 80 countries.

- 4.1. NSW bid to host WCEF2021 in Sydney with the support of Open Cities and a CE industry consortium

## CONCLUSION

The NSW CE draft policy is an important first step towards positioning NSW to be a national and international leader, harnessing the wave of disruptive technologies and business models that are already driving resource productivity and efficiencies around the globe.

While leading and innovative Australian businesses are part of this transition, a lot more work needs to be done right now for NSW to secure its place in the global CE 2.0.

Europe, led by Finland, Japan, China and some Canadian and US cities are now leading the transition. They are catalysing new markets and allowing people to recycle their waste over and over again in a way that extends the value chain, giving more people and businesses a chance to participate.

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<sup>7</sup> <https://www.slideshare.net/SitraEkologia/jyri-arponen-circular-economy-playbook>



While NSW is starting with waste recycling, Open Cities believes it is important these markets are extended from the outset to utility and mobility services. Maximising resource life span and use within the value chain to use resources for longer while minimising waste, is proving to be a successful way to drive job creation, productivity, higher efficiency and innovation as we are seeing in other economies embracing CE.

More banks are moving to invest in CE because of the new revenue streams and long-term risk mitigation benefits of circular businesses. These businesses reflect the fact that consumer demand is changing from owning to using. New ownership models are now based on sharing and prosuming.

Innovative businesses already understand the impact of resource consumption and their rising costs is a significant risk that cannot be ignored. So, they are responsibly and cleverly designing business models that both avoid these risks and redefine the benefit.

NSW needs to focus on transitioning and fast. All Australians need to be included- businesses that have been good corporate citizens need to be supported in the transition, and new circular business models currently shut out need to be let into the market. Many of these new businesses, including Open Cities members, cannot compete fairly without level playing fields and better regulation.

There is no doubt policy targets and changes in regulation are the first requirements of this economic transition. Fair policies that are consistent and reliable will ensure we can realise the economic benefits. Tariff structures that recognise circularity and are not based on linear externalities need to be developed not just in the waste sectors, but in water, energy, mobility.

It's great to see NSW moving forward with this critical economic policy thinking. It's a unique opportunity to bring together government with CE industry and consumer leaders in a coalition that informs Australia's transition.

We look forward to working with the EPA and Government agencies and would welcome the opportunity to meet with you to provide more detail.

Yours sincerely,



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