Comments by Will Rifkin, emeritus professor, U of Newcastle, and consultant on circular economy, sustainability, and impact assessment. 4/4/25

On the second key point of the overview on page 2, concerning barriers to the uptake of circular opportunities:

> *Some would add to this list of barriers the requirement for businesses to forge relationships within and across supply chains to the extent that they are not accustomed to. That barrier is not unique to Australia, but it may be exacerbated in Australia due to the high reliance on imports (and export markets). It could be argued that there is a potential for these cross-connections to be forged more readily within Australia than they have been in other First World countries due to Australia's relative isolation.*

On the third key point of the overview on page 2, concerning harmonisation of regulations:

> *Harmonising regulations has the potential to offer economies of scale. However, it can also be seen as less of a barrier when CE is perceived to be place-based due to the relative cost of transporting low-value, 'waste' materials. That is, the CE is perhaps most efficient within a regional context, and within a region, regulations tend to be consistent (except, perhaps at state borders - e.g., Albury/Wodonga, but that is not where population and production are concentrated).*

On the fourth key point of the overview on page 2, concerning information exchange platforms:

> *Such platforms exist, but they face a critical mass issue. Might be good to revisit the development pathways that have led to successful platforms, from The Trading Post to Ebay to Realestate.com.*

On the fifth and final key point of the overview on page 2, concerning information and decision-making:

> *The greatest tonnage of materials and products about decisions are made are consumed (or distributed) at corporate and government levels. So, the information needs to inform people who have to navigate their own bureaucracy and the people who set policies for those who work in procurement.*

On the uptake of circular economy opportunities in Australia on page 4:

> *It might be handy to identify some powerful models for what the circular economy could look like in different sectors. It has been argued that Australia's $9 trillion real estate market is a form of circular economy. People value buildings and land and have developed markets and regulations to keep them in use at their highest value for numerous cycles of ownership. A lot can be learned about what elements a circular economy requires from viewing current marketplaces for real estate, cars, and other valued commodities.*

On measures of Australia's materials productivity on page 5:

> *This skewing of aggregate national figures needs to be highlighted more often. Also skewing figures is Australia's boom in the construction of infrastructure. That has led to rises in*

construction and demolition waste but also rises in tonnages of materials recycled. That is, construction and demolition have been newly initiated under more recent belief systems and updated govt regulations, whereas manufacturing, for example, may be more longstanding and harder to shift.

On the notion of 100% material circularity on page 5:

[it would not be] optimal or even attainable in the near term.

On the role of government facilitating coordination and information provision on page 5:

Yes, government can have a role in providing information, facilitating coordination (or incentivising it), and helping to mitigate financial risk.

On the priority sectors identified on page 6:

It might be handy to put some timeframes on these sectors, if timeframes make sense. For example, agriculture goes through annual cycles, but built environment and mining are linked to the life of a building or life of a mine, which may be 50 years or more. E-waste reflects turnover of IT equipment in under a decade, and clothing cycles can be a matter of months to years.

For construction:

[Construction of buildings and infrastructure involves] large tonnages of sometimes energy intensive materials, like concrete.

Might be better to say, "modern design and construction methods" as CE advocates keep arguing for shifts in design. Design can also include selection of materials, e.g., going with gluelam beams instead of steel.

For food and agriculture:

Might be good to remind readers here what these materials [used in this sector] are, as many will imagine that crops just need water. For that matter, where does water fit into the discussion here on CE? Or, is it better to acknowledge its role but state that it deserves its own circularity study?

For mining:

[Mining] produces more material designated as 'waste' than all other sectors combined.

That is great that you are recognising this long-term perspective [for alternative post-mining land use], what happens to the landscape after 50 years of mine operation. One can also note - as you probably have in the main report - that there remain landscapes that were despoiled a hundred years ago.

On some existing regulations favouring more linear processes on page 7:

There are so many things that create inertia in an industry or market. Not sure that 'level the playing field' is the right metaphor, but many people will understand the general idea. What one ends up doing is just sloping parts of the playing field in another direction …

On innovation enabling sustainable production processes on page 7:

> *Is there anything that the PC can do in proposing alternative measures of productivity that could help to stimulate more circularity? For example, a colleague notes an emphasis on products rather than services in much of the productivity discussion by govt. Environmental analysts would cite the benefits of including env externalities in economic calculations.*

On prescriptive building standards limiting the use of recycled materials on page 7:

> *Somewhat related to the point above - CE will take off when it resonates with other high priority issues. Those issues include raising productivity, increasing sovereign mfr capability, and significantly boosting housing stock. To what extent were these synergies explored?*

On improving information provision across and within governments on page 8:

> *A related point was raised a few years ago by someone in the NSW government. She stated a critical need to coordinate CE-related activities across different govt departments. It seems easy to see how a lack of such coordination occurs, and one would hope that governments develop mechanisms to enable the work of brokers who can burrow between silos.*

On governments supporting businesses to navigate regulations through direct engagement, brokering services or industry partnerships on page 9:

> *Sounds like a good idea. It relates to that notion that CE requires collaboration and coordination, which suggests a need for intermediaries/brokers. Getting that role initiated can be a chicken-and-egg problem in the early years - one needs enough clients to fund the brokering role, but there is not enough demand initially …*

On government procurement facilitating coordination between businesses and government on page 9:

> *Is there a group with the Dept of Defence focusing on CE? They are likely the single largest procurement organisation in the country. Also, their current suppliers are used to dealing with intensive regulation. That said, CE options may result in new suppliers having to be brought into the Defence procurement market.*

On government supporting place-based initiatives in a way which enables local activities to grow so they do not require ongoing government support on page 9:

> *These points seem to align with considerations in the Hunter region about development of circular precincts. One can also think creatively about what counts as a 'precinct' in terms of geographic extent. A precinct could be a destination for bulk transport of recyclable materials, e.g., plastic from Melbourne ending up in Parkes, NSW.*

On obtaining a detailed understanding of the costs of benefits of a mandatory product stewardship scheme for packaging before introducing stronger regulation on page 11:

> *There are also questions about potential impact in the near term versus necessity in the long term. That is, it might make sense to ramp up stewardship schemes as something that will*

ultimately have to be adopted in the long term. There should also be consideration of issues like abuse of stewardship schemes, as seen in the recent verdict and fines of automakers in Europe.

On product labelling schemes on page 11:

These sorts of moves toward greater transparency seem worthwhile. However, they should be tailored to reflect lessons learned about labelling other products - like lists of ingredients on foods, use-by dates, country-source information and potential health benefits or hazards. There is a lot to be learned there.

On forming a suite of indicators to monitor progress to move to a circular economy on page 12:

Good acknowledgement of how tricky it is to get decent data these days on material use and emissions. They are all estimates. One has to distinguish the level of accuracy needed. For setting priorities, not much accuracy is required. For tracking progress, a bit more precision (consistency) is needed. For cost-benefit calculations, great accuracy and precision are desirable. Indicators are often particularly useful as 'boundary objects', things that people meet and talk about, areas of common knowledge and interest. The indicator value and trend is the start of the conversation, not the end. See my previous work on co-design in formulating and implementing the UQ Boomtown Indicators and provision of data for the Hunter SDG indicators dashboard.

On the fourth sub-point of the first point of information request 4.1 on page 13:

As you would imagine, there are significant barriers here in terms of the culture of the building construction industry, its inherent conservatism, avoidance of blame or liability, and arrays of contracting and subcontracting relationships. It is a complicated 'systems change' challenge, much more than just shifting standards. Such changes require internal 'leaders' distributed throughout sectors of government and industry who feel informed and endorsed to drive change. One model for such system change might be seen in the circular economy leadership accelerator program developed for NSW Sustainability Advantage (and designed by Go Circular and Blue Tribe Group; a project that I helped with). Essentially, it is a program for 'change agents' - teaching them about CE and about driving change in their organisation and building a community of practice. The general comment here is to look to models, initiatives that have accomplished tasks similar in ways to the ones that are being proposed here.

On information request 4.2 on page 14:

I like the focus here on coordination mechanisms. That is akin to arguing for development of a community of practice in sustainable procurement.

A colleague from overseas noted that there is no university training in procurement in Australia. So, one could actually look long term and recommend some sort of forum to explore development or identification of career pathways, which have as one element some education in sustainable procurement. Of course, it is hard to imagine an 18-year-old stating that they want to be in procurement. So, the educational pathway may be more about sustainability overall, with options to learn about various supporting capabilities, such as ones that this report has uncovered. Going to Universities Australia may be too big picture. Perhaps, it is something to explore with the associations of deans or associate deans of business schools.

On reform direction 4.3 on page 14:

> *Here is one of those opportunities that I noted earlier where one aligns the CE focus with a recognised 'burning platform', in this case, the housing shortage. Attach your CE cart to their housing horse.*

On the first point of information request 4.4 on page 15:

> *You have probably seen this report already. It was a 'rapid review' commissioned by NSW Circular (now Circular Australia) to identify how to build CE considerations into the business case processes of the NSW government related to precincts and infrastructure. The team writing the report was led by Prof Ali Abbas of Sydney Uni and myself.*
>
> *https://circularaustralia.com.au/wp-content/uploads/2022/03/NSW-Circular-Precincts-Infrastructure-Rapid-Review-2022.pdf*
>
> *There is no mention of design for disassembly, though, which seems to be your question here. On that point, it might make sense to touch base with a company like Net Modular, who make all of the demountable classrooms for the NSW Department of Education. They had a strong internal program of reuse and recycling. That slipped in recent years (according to a former executive), with more virgin materials being used.*

On information request 5.1 on page 16:

> *Great idea. One challenge comes from the culture of the retail supermarket industry. Supermarkets try to keep their shelves full until the end of their business day, as that is part of their marketing message. So, they have built in the need to throw away food at the end of the day. Would be great to get the supermarkets on board with donating much of that surplus food. Explore how to build that request into the outcomes from the possible Royal Commission on price gouging and collusion by the major chains.*

On the first point of information request 5.3 on page 17:

> *Good focus. Have noted some barriers in two projects now promoting development of a community of practice in CE among operators of cafes and restaurants. Businesses on a cafe strip cannot pool their organic waste, as it needs to be handled by a licensed waste company once it leaves the premises. So, how are they are going to send it down the road to the supermarket that could house the neighbourhood desiccating or macerating machine? Does one need to create a separate category of material that requires no license or call the food waste, 'food', instead of calling it 'waste'?*

On the second point of information request 6.1 on page 17:

> *Good idea to explore. The more there is a push for transparency, the more labelling will be abused or made ambiguous.*

On the fourth point of information request 7.1 on page 20:

Certain sectors of the nearby communities might see barriers less in terms of regulations, per se, and more in terms of social licence to close or transition. There are guidelines on more participatory ways of determining post mining land uses assembled with community input and published a couple of years ago by Hunter Renewal.

https://assets.nationbuilder.com/lockthegate/pages/8176/attachments/original/1690764718/Blueprint_final_1.pdf?1690764718

You might hear similar concerns in the Latrobe Valley; ask my colleague there, Assoc Prof Jessica Reeves of Federation University.

On an interjurisdictional body for circular economy harmonisation in reform direction 10.1 on page 25:

Good idea to push for harmonisation in terms of making economies of scale possible. However, harmonisation can also slow things down as the partners seek the least common denominator. That said, the processes involved in harmonisation can provide an opportunity for different jurisdictions to share leading practices. So, how does one balance building the size of the market through consistency while maintaining the value in experimentation in different jurisdictions?

On information request 10.2 on page 26:

Good idea - brokers and/or other sorts of intermediaries are essential. In academic terminology, that is sometimes referred to as 'meta-governance', having a player who moves around helping others to do their mandated jobs more effectively.

On the first two subpoints of the first point of information request 10.2 on page 27:

Good idea, build on existing industry or regional bodies. In the Hunter region, for example, there is the Business Hunter and the Committee for the Hunter (who are not yet focused on CE) as well as Hunter iF (who host the annual innovation festival), HunterNet, the Hunter Joint Organisation, and the Hunter and Central Coast circular economy facilitators network, who are focused on CE.

On information request 10.3 on page 28:

It is a great idea to support innovation. However, 99% of start ups do not grow into businesses at scale (an area where I used to teach, and I now serve on the board of Hunter iF, who host the region's innovation festival). Nonetheless, supporting a start up may obtain visibility for a certain type of product or service, and it certainly boosts the capability of the core team in the start up. So, consider support for innovations being as much capacity building as fostering particular innovations. Any scheme to support innovation would need to be tolerant of having a high percentage of failures (the products or services failing to gain traction).

From this perspective, a key thing with such experimentation is learning about what works and what does not work in the technology and in the market and then sharing that knowledge.

On the sixth point of information request 10.5 on page 29:

There are people who would argue that First Nations groups have generally maintained a more holistic and circular view of things. But it is good, as you note, to not only honour that history but also address closing the gap. Studies suggest that innovations are often taken up most readily

by those with discretionary resources, who can experiment. In this domain, might be best to partner with organisations who already have a track record for improving employment, health and wellbeing in First Nations communities.

On the first subpoint of the first point of reform direction 10.5 on page 29:

As I noted in comments in the introductory sections above, there is lots to gain from establishing such indicators and some pitfalls to avoid. What strikes me here is the breakdown by sector. Supply chains and services can often cross sectoral boundaries. How does one handle that? Additionally, sectors are really appealing to economists, neat boxes, but they are not necessarily what many people in business think of. So, it might be worth experimenting with some other types of categorisations. As someone once said, "The aluminium and glass do not know what sectors they are in."

On the seventh point of information request 10.6 on page 30:

Be careful about how many indicators are employed. Data people tend to love to share their information, which is fine. However, what some people need in order to drive business decisions are report cards rather than reams of data. The report card suggests where to focus. Australia is actually a leading country in use of report cards, such as in tracking the health of river basins in a region - https://www.stateoftheenvironment.des.qld.gov.au/pollution/water-quality/water-quality-report-card-coverage. Indicators are one area of focus of my work. Someone who knows a lot about the promise and practical and political pitfalls of indicators is Prof Rob Kitchin of Maynooth Uni in Ireland - https://kitchin.org/wp-content/uploads/2019/04/RSRS-2015.pdf