RIGHT TO REPAIR SUBMISSION
TO THE AUSTRALIAN PRODUCTIVITY COMMISSION

"Somewhere the circuit is not being made when it comes to the repair of electrical items and the urgent need to reduce e-waste" Mend It, Australia

"Actioning their right to repair, in a utilitarian way, is typical of accomplished tinkerers. There is no time to waste...or things for that matter!" Mend It, Australia

We, Danny and Karen Ellis are two retirees who come under the banner of Mend It, Australia [MIA]. We campaign and advocate for the right to repair on Twitter. We also administrate a Facebook page titled Right to Repair Australia where we collate and post articles relevant to the Australian context and those from Europe, UK, USA, Canada and South Africa.

MIA's submission will focus on the repair of household electrical and electronic items, and will cover some of the issues outlined from pages 18 – 25 in the Issues Paper, under the headings of:

Planned product obsolescence strategies pgs 18 - 21
The implications of repair issues for e-waste pgs 21 – 24
Possible policy options to address barriers to repair pgs 24 - 25

As volunteers who have attended weekly community repair events across Victoria, MIA is confidently able to respond on behalf of people who attend or who volunteer regularly at community repair events, bringing or fixing items respectively, that would otherwise be discarded into landfill or downcycled. We have a good understanding of the benefits of community repair and also the barriers to it.

It was noted on page 1 of the Issues Paper the following:

"…this has led to the creation of numerous 'repair cafes' around Australia and a growing network of self-repair hobbyists."

It is important to note that the repair café model is not the only initiative related to community repair that is worthy of attention in the right to repair debate. Refer to MIA's map.

MIA is available to elaborate on our experiences of various types of community repair set-ups both nationally and globally. We attended 43 repair events in 2019. Because we are roving repairers, across various types of events, we have no allegiance to a specific community repair type.

There are barriers to community repair that are frustrating and not helpful. These do need to be addressed, if grassroots community repair is to be sustainable. Various community repair models should be funded by governments on a recurring basis without the need for volunteers to be applying for grants every 6-12 months. When community repair groups, run by volunteers, seek to set up free services in their communities, they are oftentimes confronted with pricey insurance fees, and Councils and/or organisations charging for venue hire. Some groups have resorted to crowdfunding to cover these costs.

Venues should be provided by local councils and/or other organisations for free and public liability and volunteer insurance should be ongoing and covered by structural grants. Insurance must be addressed to ensure it is consistent across Australia and covers the electrical repair of household appliances [refer below for further discussion on this] Victoria Managed Insurance Authority's insurance coverage for community repair events is worth exploring.

Also, there can be an issue with sustainability of these activities over the long term because community volunteers have to write lengthy grant submissions, coordinators do not get paid and volunteers who travel to community repair events are not reimbursed for travel expenses and/or consumables used.

For example, Melbourne's first repair café has closed indefinitely. Despite its well attended events and talented group of fixers and menders, there was no person to succeed the outgoing coordinator. Albury-Wodonga Repair Cafe has recently advertised for a paid coordinator which is a rare but a smart move towards a more sustainable model.

The Bower Resource and Recovery Centre is a charity that includes community repair events. However, it is to be noted that this model is the next step up from the monthly neighbourhood community repair events that are organised by volunteers.

MIA was recently informed of Repair Sheds by Sonja Terpstra MP. Refer to this announcement by the Victorian state government.

"Councils, not-for-profits and community organisations are encouraged to apply for grants of between $25,000 and $250,000 for projects like repair sheds, communal gardens and tool libraries."

Repair Sheds could be a model that moves to the next phase of cementing community repair in communities similar to some progressive Men's Sheds where women and children are welcome and community repair activities are encouraged. Community repair models need to be explored further, as there is room for different types.

It's interesting to note, that the Men's Shed model does not appear to align well with the repair café model. This is evidenced by the low number of repair cafes that are run out of Men's Sheds.

If long-term sustainability is the goal, then these repair initiatives need to be supported better by governments, as part of their Waste Management and Resource Recovery [or Circular Economy] Plans. Also, could the new Product Stewardship Centre of Excellence have a role to play? Or, in Victoria the Circular Economy Business Innovation Centre [CEBIC]?

MIA's volunteering is underpinned by several sustainability development goals, including SDG 12.

Refer to The Global E-waste Monitor 2020 pg 31 as follows:

"Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, repair, recycling, and reuse.
An increasing number of people on the planet are consuming growing amounts of goods, and it is critical to make production and consumption more sustainable by raising awareness levels of producers and consumers, specifically in the area of electrical and electronic equipment."

Last year MIA attended the Australia Waste Expo online for two sessions related to the circular economy. At this session titled Circular Economy 1, MIA [Karen Ellis] asked these two questions related to repair. No response was received. [refer below: image 1]

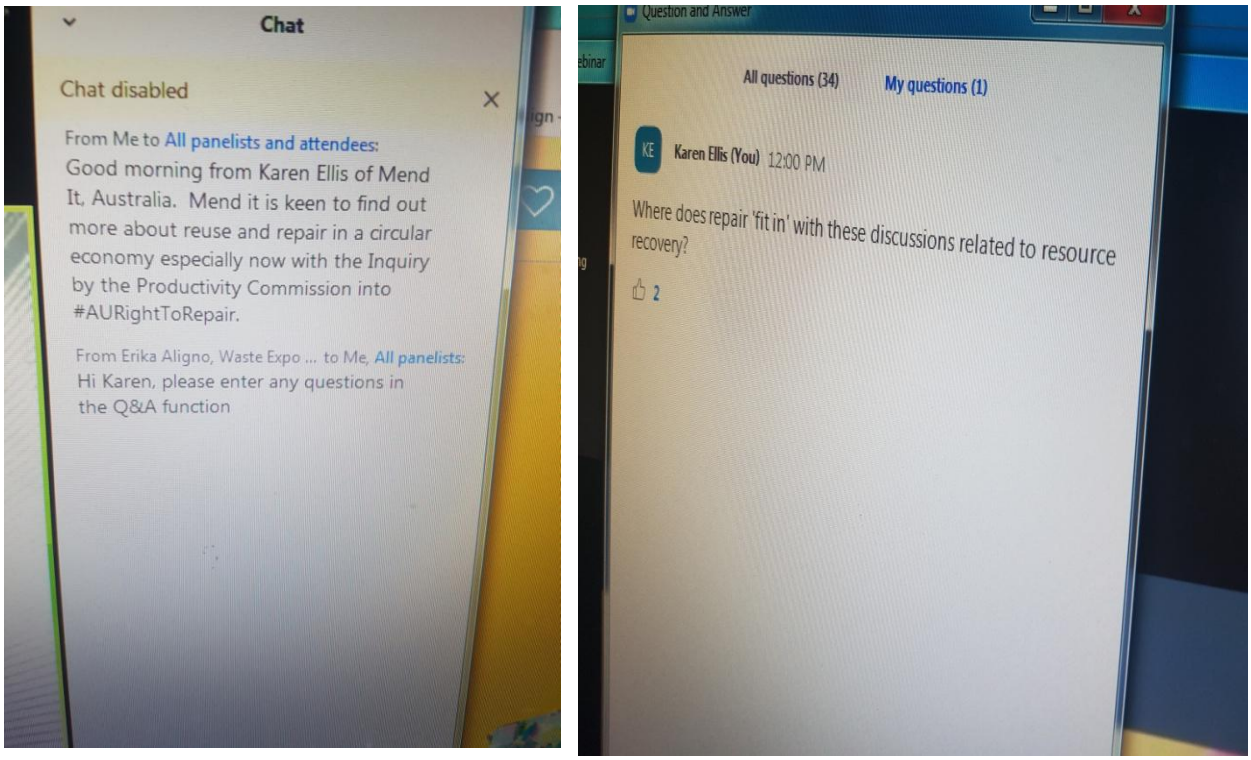

Image 1 – Why would repair be ignored in a circular economy discussion?

In 2019, MIA estimates it would have been handed approximately 150 electrical items to troubleshoot at numerous repair events around Victoria. With an estimated repair rate of 80 per cent, these useful electrical items were repaired and returned to 120 homes after being given a second chance. It is reported and also experienced by MIA, that electrical items are one of the most common presented at community repair events.

Volunteers who are competent in electrical/electronic/mechanical repair are highly sought after. As with MIA's, Danny Ellis, a person does not have to be a qualified electrician to competently repair home appliances, at a community repair event in Victoria. From our experience not too many electricians would attempt to fix a toaster. They would advise to throw it out and buy a new one.

MIA is mindful, that these days, there are minimal electrical and electronic repair shops on the high street. OEMs are offering very little to help us repair our things, like spare parts and manuals. Therefore, community repair groups run by volunteers are currently filling the need that can't be effectively met elsewhere.

From MIA's anecdotal experience from over 185 face to face and online events related to repair and reuse over the past few years, the general public does not know about the right to repair [that's an issue in and of itself for this inquiry and those of us advocating for the legislation]

Once the right to repair is flagged, some are incredulous as to why there should be laws 'preventing' them from repairing and mending the things they own. Some people question why laws are required in the first place, as they have always fixed their stuff without permission!

We, at MIA have always cared for, maintained, serviced and repaired our things. Most of our home and community repair revolves around mending textiles, and as with Russell Shaw [refer Sub004], mechanical items, and electrical and electronic appliances as well.

As with this American report, Australians too could be saving hundreds of dollars fixing their things.

Household electrical and electronic items are being treated as throwaway and are contributing to the mountains of e-waste being downcycled according to this report.

"…e-waste [is] the world's fastest-growing domestic waste stream, fuelled mainly by higher consumption rates of electric and electronic equipment, short life cycles, and few options for repair."

It would appear that recycling contractors are bound by contracts and Federal NTCRS legislation to downcycle e-waste and not save it for reuse and repair. [Image 3 - refer reply to my question at Waste Expo 2000 by Anthony Spiteri, Senior Project Manager, ANZRP Ltd]

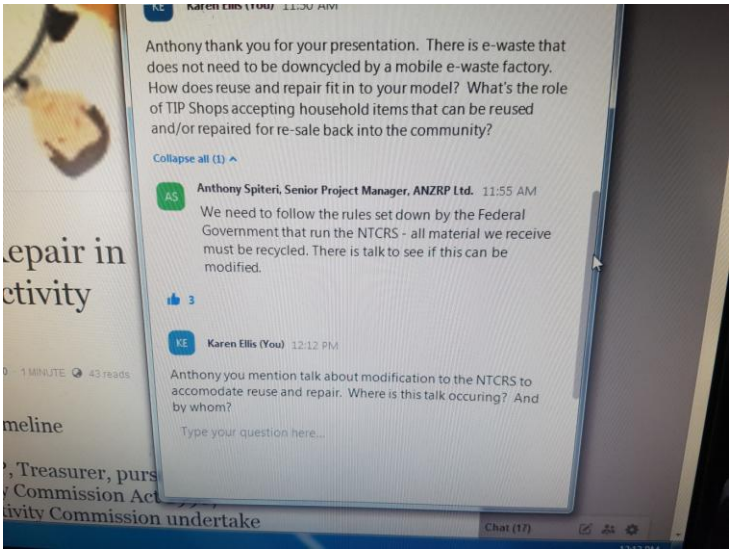

Image 3: This system has to change, as shredding items that could have a second life, via local tip shops, is wasteful and fails to align with circular economy principles.

MIA's question to the Commissioners is, "Why is there a law to downcycle all e-waste and not salvage it for immediate reuse and/or repair?"

"Establishing and defending Right to Repair is a foundational effort to assert that waste prevention activities like repair should take precedence in policy and practice to recycling or disposal," Refer article here

According to a thread of tweets by The Restart Project, the shredding of e-waste is also an issue in the UK.

Many people cannot afford to call up an electrician, as is often recommended, for the repair of small and large household appliances. It's oftentimes, if not always cheaper to buy a new appliance.

Also, as previously mentioned, there is no other alternative, as appliance shops no longer exist on the high street. And for many, it's just as easy and a lot cheaper to buy a new item and throw the old one away. That's where community repair groups are invaluable in keeping stuff from being recycled before it's time is up.

As for many owners of electrical appliances, having the skills to repair their electrical and electronic items, well those skills went the way of the dodo bird, the symbol of planned obsolescence.

And even if some people wanted to fix electrical appliances, these items are designed not to be repaired. As for replacement parts, these are either not available or too expensive. It's cheaper under the circumstance to buy a new appliance.

Here's a video about a broken SMEG toaster that MIA made for this inquiry, to visually demonstrate why right to repair legislation is required to mandate manufacturers to design for durability and repairability.

It's time for the return of vocational education focussed on learning-by-doing. It is also time to mainstream repair in primary and secondary education. Check out Sloyd which is still taught as a compulsory subject in Finnish, Danish, Swedish and Norwegian schools.

The well meaning 'safety police' has cautioned MIA to be careful about our public awareness raising of electrical repair of domestic appliances for liability reasons, as according to it electrical repair of these appliances is illegal if it is carried out by anyone other than a qualified electrician.

Myths, incorrect information and misinterpretations abound across Australia, when it comes to electrical repair of household appliances. It's important to note that from MIA's enquiries, to some repair café organisers; electrical installation legislation is confused with electrical appliance maintenance and repair.

It was time for MIA to find out the facts.

An email was sent to the electrical safety regulators of all the states and the ACT, except the Northern Territory, as follows:

"This research is to inform my submission to the Federal Government's Right To Repair Inquiry.

I am **NOT** enquiring about hard-wiring and the installation of it.

Can you please advise the following?

In Tasmania, can one undertake DIY appliance repair, on a voluntary basis without a licence, on items with a plug and cord i.e. toaster, kettle, lamp, sewing machine etc

Can you direct me to the section of the Act that would be relevant to my enquiry"

And here is the reply to the above email from the Tasmanian regulator

"Repairing of electrical appliances that connect to an electrical installation by means of a plug and socket arrangement is not considered to be electrical work in Tasmania. As this is not electrical work, there are no further requirements in regards to licencing or other mandated competency requirements.

The definition of electrical work is contained within the *Occupational Licencing (Electrical Work) Regulations 2018*, Regulation 4."

At the time of writing this submission, after emailing and receiving replies from the relevant electrical regulators, MIA confirmed it is not illegal for a person, who is unlicensed, to repair low voltage household appliances with a cord and plug in VIC, TAS, ACT, WA, NSW and SA. MIA is yet to contact the Northern Territory electrical safety regulator.

For this inquiry MIA was keen to find out if it's true that it's illegal to repair low voltage electrical appliances with a cord and plug in Queensland. According to this State's regulator it is illegal to do so unless a person is licensed accordingly.

The regulator did not have an explanation to satisfy MIA's question about why the legality around changing a light bulb is legal, when it's an electrical fix with the same risk, as repairing a domestic appliance, which is illegal.

MIA can only assume it would be an unpopular move by a government to legislate and make changing light bulbs in home across this state, the job of licensed electricians.

The community repair movement is helping to address the issue of e-waste at the grassroots level across Australia. But in Queensland competent repairers of electrical and electronic household appliances are not helped by this paternalistic law.

As for safety being a reason to prevent competent individuals from fixing kettles, toasters, and lamps etc, well that is not founded on evidence provided to MIA. And it has not been for want of trying to seek repair data related to injury and death.

What always comes up is that electricity can cause electrocution and death. Competent repairers of electrical items are well aware of the risks and how to mitigate them.

MIA formally contacted MUARC via email for this submission. It appears that in Victoria, electrocution and death by electrical DIY repair at home is not featured in 40 cases over 5 years as follows:

"Your request from late last year was passed onto me. I looked at the past 5 years July 2015-June 2020 and found 40 cases of injuries relating to home repairs of electrical items. I omitted cases where it was reported that the person was working for income at the time (i.e does not include repairers, these are DIY at home). The range of items named in the records is listed below:

- *Blender*
- *Light/light switch*
- *Intercom*
- *Fan*
- *Dishwasher*
- *Roller door*
- *Heater*
- *Air conditioner*
- *Security light*
- *Washing machine*
- *Coffee machine*
- *Oven*
- *Dryer*
- *Hot water unit*
- *Microwave*

The age range was 13-86 years and more than 90% were males. Regarding the types of injuries, the most common was open wounds (30%) followed by superficial injuries (13%), fractures (10%) and dislocations (10%). Injuries were mostly to the wrist and hand (56%), followed by head injuries (15%). Just over one quarter (28%) were admitted to hospital for further treatment. Note that this data is for Victoria only." MUARC

To double check on the electrocution by home appliance scenario, a second email was sent to MUARC as follows:

"I would like to confirm then, that none of these 40 cases was electrocution related. Please advise."

And the reply was as follows:

"No there were no electrocutions. No deaths in hospital due to these causes that I could find, although I relied on text entered at the hospitals, they may be included in another category if admitted to hospital but impossible to find."

The data from Victoria does NOT provide evidence of a high safety risk, quite the opposite when it comes to the repair of low voltage household appliances.

Also what comes up, is the concern that taking electrical items home after they're fixed, could result in houses catching on fire. These scaremongering stories are not helpful and are unfounded.

Surely, Standards Australia's wiring rules "help ensure the broader community is kept safe and secure."

MIA's Danny Ellis has passed a Portable Appliance Testing [PAT] course. These courses and those trained in PAT, appear to give reassurance to bureaucrats, insurers and community repair group organisers that items are tested for safety following repair.

PAT courses are run by private businesses and are driven by course participant turnover and the purchasing and ongoing maintenance of PAT machines.

A one day course could set a community repair volunteer back $500. PAT machine costs to purchase range from $700 - $7,000+. The calibration and/or repair of these PAT machines are recommended as per AS/NZS3760. The general consensus is that this takes place every 12 months. Costs for this maintenance range from around $60 - $350.

In relation to policy and e-waste, if governments decide to fund ongoing reuse and community repair initiatives, and as a bureaucratic measure, want to include PAT of electrical appliances, then funding needs to be made available for volunteers to be trained up, machines to be purchased and regularly calibrated.

Thank you for the opportunity to make a submission to the inquiry. MIA looks forward to the findings from the draft report in June and the relevant public hearings.

Karen and Danny Ellis
Mend It, Australia

#AURightToRepair