



**LEGISLATIVE ASSEMBLY**  
FOR THE AUSTRALIAN CAPITAL TERRITORY

---

STANDING COMMITTEE ON ENVIRONMENT, CLIMATE CHANGE AND BIODIVERSITY  
Dr Marisa Paterson MLA (Chair), Ms Jo Clay MLA (Deputy Chair), Mr Ed Cocks MLA

## Submission Cover Sheet

Inquiry into the waste management of absorbent hygiene products

**Submission Number: 13**

**Date Authorised for Publication: 15 November**

**2022**



**CONSERVATION  
COUNCIL** ACT REGION

## Submission to ACT Legislative Assembly Standing Committee on Environment, Climate Change and Biodiversity: Waste management of absorbent hygiene products

---

October 2022

The Conservation Council ACT Region is the peak non-government environment organisation for the Canberra region. Since 1981, we have spoken up for a healthy environment and a sustainable future for our region. We harness the collective energy, expertise and experience of our more than 40 member groups to promote sound policy and action on the environment.

We campaign for a safe climate, to protect biodiversity in our urban and natural areas, to protect and enhance our waterways, reduce waste, and promote sustainable transport and planning for our city. Working in the ACT and region to influence governments and build widespread support within the community and business, we put forward evidence-based solutions and innovative ideas for how we can live sustainably.

At a time when we need to reimagine a better future, we understand that the changes we need will only happen with the collective support of our community.

**For further information please contact:**



## Introduction

The Conservation Council ACT Region (the Council) welcomes the opportunity to contribute to the Legislative Assembly Inquiry into the waste management of absorbent hygiene products (AHP).

According to Sustainability Victoria, 3.75 million disposable nappies are used each day in Australia and New Zealand, and it takes about one cup of crude oil to make each nappy.<sup>1</sup> Approximately 1.7 million trees are felled each year to make enough disposable nappies for Australian babies.<sup>2</sup> Most of those nappies then end up in landfills where they produce methane emissions that contribute to global warming and leachates that pollute soils and waterways.

Lifecycle impact assessments often find that there is no clear winner between disposable vs reusable AHP, with benefits of one type being offset by negative impacts in a different part of the supply chain.<sup>3</sup> Thus, improvements need to be made throughout the supply chain and lifespan, starting with avoidance, certified responsible production, reuse and recycling.

Whilst the Council generally advocates for the replacement of single-use disposable items with reusable equivalents, we recognise that disposable nappies and other AHP offer great convenience or are essential for many settings such as childcare centres, aged care facilities and hospitals.

There are examples of waste management companies that recycle conventional AHP, separating the plastics and cellulosic fibres for use in other products.<sup>4</sup> However, this perpetuates demand for petroleum plastics. On the other hand, placing a cost on pollution (such as landfill fees) generally drives improvements in materials recovery. Policy settings and regulatory standards are efficient means of eliminating harmful materials, and community education and financial incentives encourage responsible behaviours and consumer choices.

Thus, the Council recommends the development of a mandatory standard for single-use disposable AHP to be 100% compostable, plus a suite of community engagement activities and financial incentives to encourage the efficient use of reusable items wherever possible.

## Discussion

### **Standard for compostable disposable (single-use) products**

The Conservation Council recommends establishing a standard for disposable single-use hygiene products to be 100% compostable and organic, included in the staged phase-out of single-use plastics. This should be a straightforward swap of compostable products for conventional versions.

---

<sup>1</sup> Sustainability Victoria, 31 Aug 2022, [Eco-friendlier alternatives to disposable nappies](#)

<sup>2</sup> Ones, Twos and Trees, Sep 2013, [Turning wees and poos into trees](#), StartSomeGood

<sup>3</sup> Velasco Perez, M, et al, 2020, [Waste management and environmental impact of absorbent hygiene products: A review](#). *Waste Management & Research*, vol 37 iss 6, accessed 27 Oct 2022.

<sup>4</sup> Knowaste, n.d., [Knowaste recycling specialists for absorbent hygiene waste](#)

DaiperRecycle, n.d., [We're recycling disposable nappies](#)

Tayao, IG, [Nappy waste collection 2022 – partner up with Waster!](#)

NappiCycle, n.d., [What is NappiCycle?](#)

Conventional disposable AHP contains industrially grown cotton (bearing chemical fertilisers and pesticides, and embodied water consumption), absorbent chemicals and petroleum plastics that are harmful both to the wearer and the environment when disposed into landfill.

Organic compostable nappies, sanitary and incontinence pads that eliminate harmful chemicals are already available in supermarkets, pharmacies and health food stores, although they are still in the minority relative to conventional disposable products. Eliminating synthetic, plastic and chemical materials from disposable products would remove these pollutants from landfill for products that end up there.<sup>5</sup>

Separating used hygiene products from other household and commercial waste and diverting it to industrial composting would reduce contamination of mixed recycling and divert the waste from landfill, also reducing associated methane emissions. The ACT Government could run a trial of supplying compacting nappy bins and/or compostable bags to households that need them, similar to the FOGO kitchen caddies. These are already widely available and effective at containing odours. This would include a household collection service.

Councils in Australia and overseas are experimenting with AHP waste management services. Carmarthenshire, Pembrokeshire and other UK County Councils run a subscription-based fortnightly “purple bag” hygiene and nappy waste collection service to divert conventional nappies and selected hygiene products from landfill to recycling.<sup>6</sup> Materials are turned into plastic seating, kitty litter, road base and other products. This recycling process provides a strong reduction of greenhouse gas emissions (–67 kg CO<sub>2</sub>e) compared to incineration (+215 kg CO<sub>2</sub>e) or landfill (+130 kg CO<sub>2</sub>e).<sup>7</sup>

In 2019 Bega Valley Shire Council ran a trial of collecting compostable nappies and incontinence products with FOGO for composting.<sup>8</sup> It may be appropriate to stream AHP to its own composting vessel to avoid contaminating FOGO with human waste, but would not require different technology than that already being implemented for local FOGO composting. Teaching parents and carers to drop poo into a toilet before disposing of a nappy or adult continence product would also result in a cleaner composted product.

The ACT Government could also provide support to community-led initiatives such as ‘Ones, Twos and Trees’ that aim to educate the community and help parents offset the carbon emissions of their children’s nappy consumption by planting biodiverse forests,<sup>9</sup> fulfilling the circular economy principle of regenerating nature.

---

<sup>5</sup> Luchese, CL, et al, 2021, [Disposable, reusable and biodegradable hygiene products](#), *Antimicrobial Textiles from Natural Resources*, pp 421–54, accessed 27 Oct 2022.

<sup>6</sup> Carmarthenshire County Council, n.d., [Hygiene and nappy waste](#)

Pembrokeshire County Council, n.d., [Absorbent hygiene products](#)

<sup>7</sup> Arena, U, et al, 2016, [Technological, environmental and social aspects of a recycling process of post-consumer absorbent hygiene products](#), *Journal of Cleaner Production*, vol 127 pp 289–301, accessed 27 Oct 2022.

<sup>8</sup> Bega Valley Shire Council, 16 Sep 2019, [Local families help Council with nappy trial](#)

Proust, K, 9 Apr 2022, [NSW’s Bega Valley compostable nappy trial success garners global attention](#), ABC News

<sup>9</sup> Ones, Twos and Trees, Sep 2013, [Turning wees and poos into trees](#), StartSomeGood

## Encouraging behavioural change to replace single-use items with reusable versions

Behaviour change depends on shifting social norms. This can be achieved by making responsible products more readily available, providing financial support to overcome cost barriers, and educating the community and healthcare providers about responsible options.

### *Menstrual products*

Norms are shifting as underwear and hygiene product manufacturers are seeking to become more sustainable. Clever, targeted advertising is normalising reusable menstrual products with slogans such as “bloody comfy undies”.<sup>10</sup> Several brands of period underpants are now readily available online and in supermarkets, heralding a generational shift away from single-use sanitary pads.

Information about reusable sanitary products (underpants, pads, cups etc) should be included in school puberty education programs and provided by GPs as the preferred option for girls commencing menstruation. GPs could also provide this information to women as part of routine checkups or PAP tests.

### *Avoiding nappies*

The first option in reducing any waste is avoidance. Australian social norms assume that children need to wear nappies for several years, with toilet training (ie. transition to underwear) typically starting at around 2 years of age and required by the time a child starts preschool at the age of around 4 years.<sup>11</sup> Using this timeline, sources estimate that each child will need their nappy changed thousands of times.<sup>12</sup>

However, many cultures find the notion of babies wearing garments that capture their own waste to be bizarre. Children can be ‘potty trained’ from birth when parents practise ‘elimination communication’ or ‘natural infant hygiene’ with their infant.<sup>13</sup> Nappies may still be worn as ‘back up’ until the child is mobile enough to take themselves to a toilet, but this method saves thousands of nappy changes and laundering, is healthier for babies and empowers toddlers to understand their own bodies from an early age. This is a practice that the ACT Government could educate expectant and new parents and maternal/natal healthcare providers about, as an option for expectant parents to consider.

### *Reusable nappies*

Modern, reusable cloth nappies are widely available, in a range of designs that are effective and easy to use. However, the initial purchase price and ongoing laundering for new parents can be a disincentive compared to the apparent cheapness and convenience of disposable nappies, although cloth nappies very quickly pay for themselves compared to the regular ongoing purchase of disposables.<sup>14</sup> Cloth nappies tend to be more environmentally friendly than

<sup>10</sup> Bonds, n.d., [Bloody comfy period undies](#)

<sup>11</sup> Raising Children, 30 Jul 2020, [Toilet training: a practical guide](#)

<sup>12</sup> Brisbane City Council, n.d., [Nappy waste in Brisbane](#)

<sup>13</sup> Diaper Free Baby, n.d., [A natural approach to responding to babies’ elimination needs](#)

Mum Central, 25 May 2020, [Infant potty training: how this mum toilet trains her kids from birth](#)

<sup>14</sup> Banyule City Council, 9 Sep 2021, [Banyule reusable nappy launched](#)

disposables (although this depends on the materials used, such as organic vs conventional cotton, synthetic and plastic linings etc), particularly if laundered with eco-friendly detergent in a water-efficient washing machine powered by renewable electricity then line-dried in the sun.<sup>15</sup> The longer they are kept in use (eg. for two, three or more children – not necessarily in the one family), the greater the ecological savings compared to the same duration of disposable nappy consumption.

The Government could consider providing education about cloth vs disposable nappies via pre- and post-natal parenting classes, obstetricians, general practitioners, midwives and other baby services. Providing financial assistance to families to purchase and launder reusable items may also assist uptake. Nappy loan libraries may also be useful for low-income households, enabling swapping to larger sizes as infants grow, and keeping cloth nappies in use for as long as possible. Subsidising nappy washing services<sup>16</sup> may also make cloth nappies more attractive for low-income or busy families. Ensuring that childcare centres facilitate the use of cloth nappies is also critical.<sup>17</sup>

Liverpool City Council is conducting a trial of a cloth nappy rebate where residents can claim up to \$150 for the purchase of reusable nappies and sanitary products.<sup>18</sup> Banyule City Council worked with a local designer to showcase local landmarks and wildlife on cloth nappies, offering them at a special price for families that book a workshop.<sup>19</sup> Sutherlandshire Council offers a \$50 rebate for the purchase of reusable nappies or sanitary products.<sup>20</sup> The costs of these schemes to Councils is easily offset compared to the cost of disposing single-use nappies to landfill.

Education about reusable adult incontinence products could be likewise delivered through nursing courses, by GPs and directly to aged care facilities.

## Summary and Recommendations

The ACT Government should be striving for avoidance of single-use disposable products and encouraging behavioural change towards reusable versions of hygiene products. Where single-use disposable products are required, they should be compostable rather than contain petroleum plastics and harmful chemicals. The Conservation Council recommends the following:

- Develop a mandatory standard for single-use disposable AHP to be 100% compostable;
- Conduct a trial of curbside collection of disposable AHP, separated from other waste and recycling, to be composted, including education materials;
- Develop a suite of education materials and activities to communicate the benefits of reusable AHP to the community and healthcare providers;
- Provide financial incentives or supports to encourage the use of reusable items; and
- Establish a community cloth nappy library.

---

<sup>15</sup> Sustainability Victoria, 31 Aug 2022, [Eco-friendlier alternatives to disposable nappies](#)

<sup>16</sup> Laundrybox, n.d., [Better for baby, better for the environment](#)

<sup>17</sup> Fiona, 9 Apr 2018, [Childcare centres: some considerations when providing cloth nappies](#), Australian Nappy Association

<sup>18</sup> Liverpool City Council, n.d., [Cloth nappy rebate](#)

<sup>19</sup> Banyule City Council, 9 Sep 2021, [Banyule reusable nappy launched](#)

<sup>20</sup> Sutherlandshire, n.d., [Reusable sanitary product and nappy rebate](#)