



LEGISLATIVE ASSEMBLY
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STANDING COMMITTEE ON ENVIRONMENT, CLIMATE CHANGE AND BIODIVERSITY
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Submission Cover Sheet

Inquiry into the waste management of absorbent hygiene products

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**Submission for the Standing Committee on Environment,
Climate Change and Biodiversity for the inquiry into the
waste management of absorbent hygiene products**

Legislative Assembly for the Australian Capital Territory

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This submission considers only the absorbent hygiene product of disposable baby nappies.

Background

I am writing this submission as an Independent Consultant of EA Sustainability. I am a sustainability and waste expert with extensive experience in community adult education primarily delivered for local and state government roles and through my own businesses. I hold a Bachelor of Science in Environmental Management and Ecology.

After 12 years in these government roles educating householders about living sustainably, I set about to fill a waste education gap for disposable baby nappies. Through my previous business Cloth Baby, I retailed existing brands of Australian modern cloth nappies.

Focusing on new parents, I realised there was more education required so that parents were able to choose and use cloth nappies and successfully continue to use them to achieve waste avoidance.

I established EA Sustainability primarily focusing on education about the benefits and use of reusable baby nappies, and about the positive flow on effect for the environment, financially and socially. I have spoken at waste focused conferences about this topic and the issue of disposable baby nappies as a whole. I also advise on other relevant community waste topics centred around waste avoidance and community behaviour change.

The solutions and recommendations detailed below have come from my years of industry experience with both business and government work to do with parents using reusable nappies for their children and behaviour change needed to take on a new sustainable initiative.

Responses to the Terms of Reference

b. the quantity of absorbent hygiene product waste produced, including the methane gas emissions generated by this waste in landfill

Calculating the number of disposable nappies used by babies is variable and not limited to; the unique length of time a baby is in nappies, the number of changes performed by different carers and the different absorbent capabilities of different brands of disposable nappies.

There is no one answer for the quantity of waste produced per child, rather a calculation has been performed based on the median number of nappy changes per day, for each six-month period until the baby reaches the age of two and a half years. This approach has been to take into account the variables listed above. This calculation has resulted in the number of nappy changes from birth to the age of two and a half being 6,840 per child.

To calculate the emissions created by disposable nappies in landfill, an average weight of a used disposable baby nappy was measured at 478 grams (per nappy, using an average weight of 28 grams of an unused disposable nappy.) Again, the weight of a used nappy is variable and not limited to; the diet of the child, how long the nappy was used for and the brand of disposable nappy used.

Methane gas emissions were calculated based on the number and weight of nappies per child. The amount of CO₂ emissions from one child's disposable nappies in landfill is 6.53 Tonnes or 0.261 Tonnes of methane emissions.¹

¹ 1 Tonne of disposable nappy waste = 2 Tonne of CO₂ emissions. Calculated on the average weight of a used disposable nappy ending up in landfill using <https://carbonneutral.com.au/carbon-calculator/>

e. the opportunities and challenges to boost absorbent hygiene product waste minimisation through incentive programs and other means in the ACT, including the feasibility of community trials for compostable, reusable and cloth nappies;

Local councils within Australia will primarily provide incentives in the form of rebates for the purchase of reusable cloth nappies. This is a post payment, generally half of the cost to a maximum amount of rebate. Local councils will run rebate programs for a selected trial period and the number of councils offering a rebate at one time is variable.

Other incentives include providing multiple reusable nappies to residents, either for free or at a reduced cost.

Not all councils will provide educational support for new parents accessing reusable nappies through a rebate program. This could be seen as a downfall of a rebate program as there is limited awareness and capacity building for new parents. Plus, the cost benefit of a rebate investment to waste reduction in landfill could also be addressed and measured.

Educational workshops and demonstrations should qualify residents to take part in a rebate or incentive program. By delivering education directly to the parents who will receive the rebate or incentive, there is a higher probability that the products will be used for the entire napping time of the child due to the layers of information to understand for sustained use.

f. identifying social impacts for carers created by a change to low-waste solutions

Using reusable nappies can have a positive impact for new parents. To achieve waste minimisation with greater uptake of reusable nappies amongst new parents, peer-to-peer connection is needed for behaviour change and support. Peer-to-peer learning and support among new parents can foster sustainable behaviour change, not just for reusable nappies but other reusable items for babies and children

h. identifying short and long-term solutions to the recycling and waste management of absorbent hygiene products, including, but not limited to:

- i) single use vs reusable products**
- ii) options for managing waste as part of planning for the citywide FOGO service;**

Solutions for minimising nappy waste in landfill should not only rely on reusable baby nappies being used only. Disposable nappy use is highly likely to continue amongst parents, whether it be a part time use integrated with reusable nappies as a means of convenience or life stage situations. Implementing a solution will take time addressing behaviour change and the broader community's perception of baby nappy waste.

Firstly, promoting and supporting reusable baby nappies within the community starts the conversation, raises awareness of the scale of the waste item, recognising the issues of disposable nappy waste. Implementing a reusable nappy program with education and resources is a low-risk step without infrastructure or major resources needed.

If rebates or incentives are offered, these are best linked with education, either in a workshop/learning environment and at minimum, website and other information brochures. Furthermore, this opens up the possibility to test and measure uptake of reusables based on the resources delivered.

Secondly, to address the continuation of disposable nappy use, a compostable nappy option can be a means to avoid waste to landfill. Some local councils have trialled this within their FOGO (Food Organics Garden Organics) kerbside collection bin however implementing a system like this will require some strict measures and education around the type of compatible nappy accepted by composting facilities. Furthermore, with the NSW EPA introducing new rules on only food and garden waste being accepted in the kerbside FOGO bin, this might pose even more of an issue for accepting this type of waste from home in other states and territories.

A compostable nappy collection service would work best from a single source waste stream where the volumes can be monitored. For example, collection from a participating childcare service where all the disposable nappies can be guaranteed to be the compatible compostable nappy. For households, a separate collection bin paired with the education of correct compostable products and agreement of use could be a way to accept this waste. Uptake of a system like this would most likely depend on a cost benefit to the childcare centre or to the opt-in cost of the household.

If a compostable nappy option was offered, it would be best followed from the reusable offer; education and awareness of the nappy issue as a whole has already been established within the community making the uptake of a compostable system more achievable.

k. the availability of educational material highlighting the benefits of using sustainable and environmentally-friendly types of absorbent hygiene products

There is a variety of education material and content available, primarily from reusable nappy retailers. Detailing the types and styles of different modern cloth nappies plus the washing process is a crucial step for new parents to understand so that they are able to choose a good performing reusable nappy suited to their baby, plus have the knowledge of washing reusable nappies correctly. Both of these factors ensure that use is continued throughout the nappy-ing time of the child. Failures such as incorrect fit and incorrect washing can cause parents to resort back to using disposable nappies.

l. any other related matters

Through past experience of new parents achieving reusable nappy use, the best time to engage with this group is prior to the birth of the baby. This gives time for the parents to research, prepare and source reusable nappies. Once the baby is born, the health and well-being of parents and baby are usually prioritised and learning a new skill area such as using reusable nappies may not be a priority in the first months of a child's life.

The best uptake for reusable nappies I've witnessed is when education and resources are received prior to the birth of the child, not afterwards and not linked with the new parents groups/mothers groups education.

Emma Avery, EA Sustainability, October 2022