

ABSTRACT

More than 96 percent of parents using disposable diapers due to convenience, and an aging population increasingly requiring disposable personal care products, sustainable recycling of such products has become a global concern. The absorbent hygiene products take 500 to 800 years to decompose naturally. So, this process helps to recycle more and reduce carbon emissions, meet your zero waste and other diversion targets and Avoid landfill taxes.

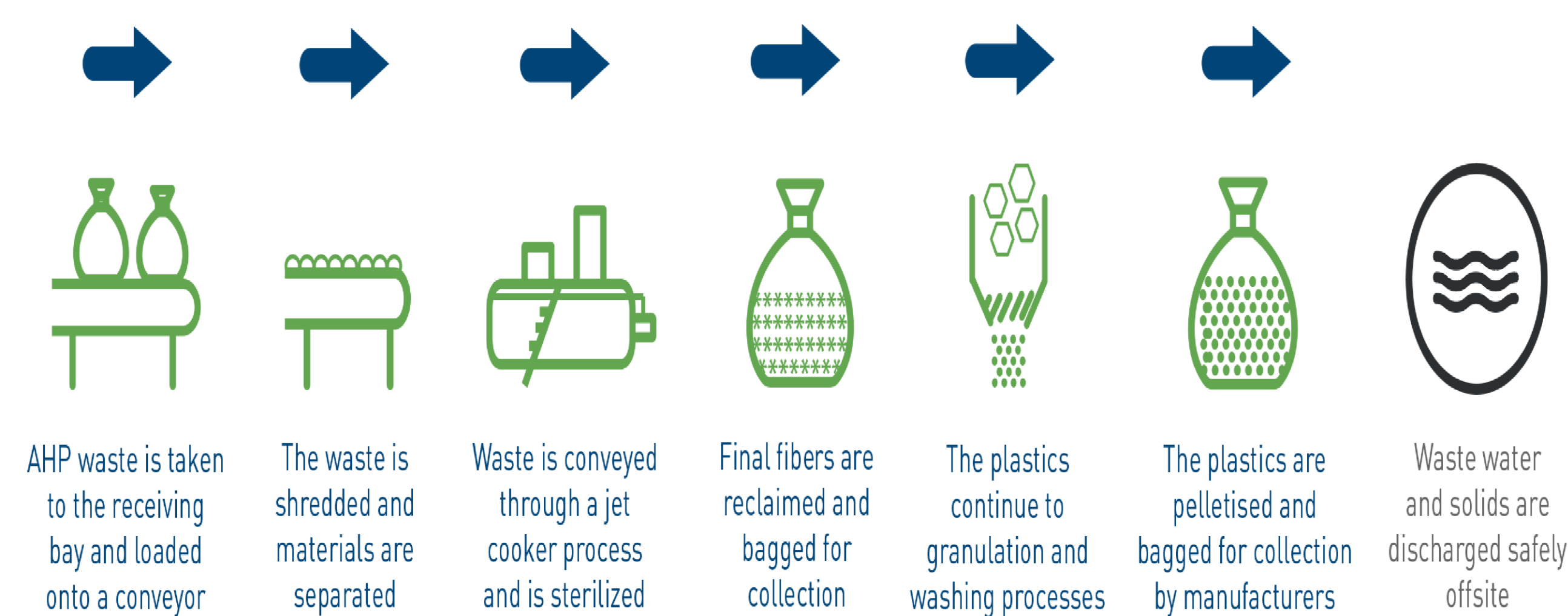
INTRODUCTION

Absorbent hygiene products are widely used in the world. Almost all the females and mothers are used absorbent hygiene products, and these generates 60 times more solid waste than raw material which is harmful for our environment to avoid this harm we introduce this process to decompose the disposal in few hours. If we naturally decomposes sanitary napkins and diapers it takes 500-800 years.

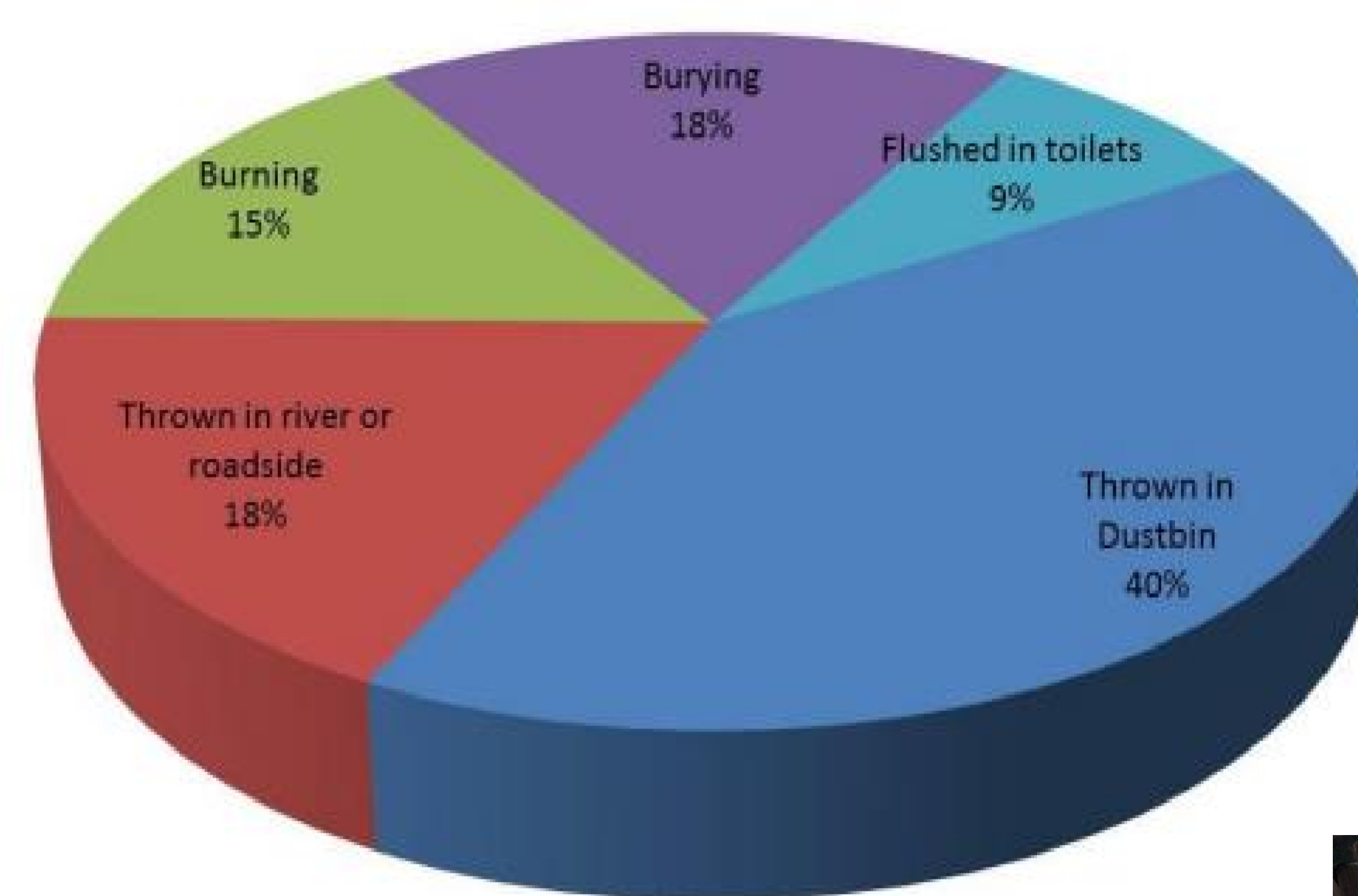
The second and harmful method to decompose napkins is to incinerate it. Disposable diapers often incorporate polypropylene or polyethylene, both petroleum-based plastics, which release fossil CO₂ when they are burned and offer no net sequestration of carbon if they are land-filled. Because of burning of inorganic material at low temperature there is a release of dioxins which are toxic and carcinogenic in nature. Napkins are made up of special 3D absorbent layer, breathable buckshee, close fitting, Side leakage proof structure. Diapers are, made up with absorbent layer, side leakage proof structure. By recycling them we obtain cellulose and plastic.

METHODOLOGY:

There are various options for recycling of absorbent hygienic products. Like. The process of sanitizes the diaper material and uses a water and mechanical system to separate the individual components so the wood pulp and plastic can be recycled. Human waste is separated and treated through the local sewage system. Up to 98 per cent of a used disposable diaper or incontinence product can thus be removed from the waste stream. High-quality wood pulp and plastic are now available for recycling.



Disposal method used



Diapers Are Composed Of



RESULT & DISCUSSION

The project which we introduces is too safe our environment from harmful bacteria. We are using shredding process in this project and it is based on shredder, steamer, decolonization, sanitization and separation.

- Used diapers and/or adult incontinence products are collected and transported to a processor or plant.
- Used disposable diapers begin the recycling process by entering a shredder that starts to break them apart.
- The next step sanitizes the diaper material and exposes it to a special chemical treatment to deactivate the super-absorbent polymers. At the completion of this washing process, the plastic materials are removed and sent to a separate device for processing.
- This produces a clean, long-length fiber and plastic that can be used in other products like paper and paver blocks.

CONCLUSION

Every year there is a large amount of absorbent hygiene product generate as a solid waste. Which are harmful and toxic for human health and raises the environmental problems, so we have to aware the population of Pakistan from harmful disease which are causing by environmental pollution, to free our environment from these carcinogenic gases and harmful diseases By recycling we make our environment healthier and remove toxic and harmful gases from our environment.

REFERENCES

- Umachitra, Bhaarithidhurai "Disposable baby diaper- a threat to the health and environment" J. Environ. Sci. Eng., 54 (3) (2012), pp. 447-452
- A. Sivan "New perspectives in plastic biodegradation Curr. Opin. Biotechnol., 22 (3) (2011), pp. 422-426, 10.1016/j.copbio.2011.01.013

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