

Vinyl in a Land Down Under

Australia uses over 50 million IV bags. Together with face masks and tubing, this creates at least 2,500 tons annually of locally recyclable material available for collection and reprocessing.

A 300 bed hospital could easily recycle around 2.5 tons of these quality PVC products each year.

Plastics represent a significant share of the general hospital waste that is sent to landfills. Because PVC is the most commonly used polymer in medical products, it makes up a large part of that waste. Anesthesiologist Forbes McGain wanted to reduce the amount of PVC that ends up in landfills., In 2009, he initiated a PVC Recycling in Hospitals pilot program at Western Health, Victoria, Australia. McGain partnered with the Vinyl Council Australia to develop the program in collaboration with Western Health, a PVC product manufacturer and a recycler. Following on the success of the pilot program was expanded to more than 90 hospitals in Australia, New Zealand, and Tasmania. The project operates with support and guidance from the Vinyl Council Australia, its members (including Baxter Healthcare), Welvic Australia, and transport companies and government agencies.

An average of 15 tons of PVC medical waste is currently being reprocessed each month in Australia. The material is reprocessed by Welvic in Australia and MattaProducts in New Zealand,

and is primarily used in safety mats and in new hoses for fire extinguishers, gardens, and industry. What started as a Victoria-based program has now expanded to include collections in Queensland, Western Australia, and South Australia.

Each ton of recycled PVC will replace about one ton of virgin PVC compound in new products, saving 80% energy, carbon emissions and resources of new products.

After learning about the PVC Recycling in Hospitals program, the PVC industry in the United Kingdom worked with recycling experts to develop its own pilot project. The average UK hospital uses 12,000 oxygen masks per year, and an estimated 2,250 tons of oxygen masks, oxygen tubing, and anesthetic masks could be recycled each year.

Today, seven National Health Service hospitals are running PVC RecoMed trials coordinated by the British Plastics Foundation in conjunction with Axion Consulting; they are being funded by VinylPlus, a voluntary initiative of the European PVC industry. Pilot programs in Canada and the United States are also now in the early stages.