**The recovery of plastic from household wastes to produce Porous Plastic Pavements (PPP).**

On average each Australian discards some 1 tonne per annum of mixed household waste.

As this mixed, contaminated waste composed of some 60% organic matter, 10% glass, 10% metal and 20% mixed plastic is costly to recycle it is often buried in landfills costing some $400/t.

Canberra with over 350,000 people currently landfills over 50,000 t of mixed waste plastic/an.

But if shredded and ‘compost cleaned’ this mixed waste can be separated mechanically into clean; glass via density, metal via magnets, plastic via combs leaving the composted organic matter.

The shredded rinsed plastic strips can be formed into mats and pressed and heat fused into felted edged sheets of specified, thickness, permeability, texture, added reinforcing and tensile strength.

Rolls or moulded forms of these porous plastic sheets to specified designs can then be used in a range of civil engineering, building, landscaping, farming and domestic applications such as for;

Pervious ground or surface covers for paths, parking areas, plazas, roads, playgrounds, sporting fields, weed mats, mulch mats, erosion control, silt traps, screens, building products etc.

Their use can help protect soils from traffic and erosion and enhance the infiltration and retention of rain into soils to regenerate green urban and rural environments, transpiration to cool habitats.

The recovery and reuse of our waste plastic via such porous plastic pavements and uses can generate major savings and benefits to government and communities in lower; waste disposal, civil and urban infrastructure, water, energy, maintenance, amenity, rural production, alternative resource usage, green environments, climate resilience and cooling costs.

Policy support for such innovative local eco-businesses will help realize such savings and benefits and generate new recycling based products, applications, employment and multiplier outcomes for Canberra via such leading zero waste technologies, products and solutions, locally and globally.