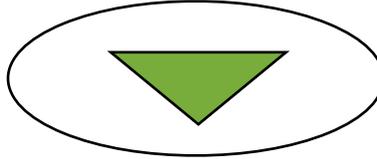


**Concept:** DIY Chicken Coop

**Goal:** To make a plastic chicken coop from waste, that outperforms the bought ones and is beautiful.

**Need:** DIY, upcycle and beautiful



**Tweak:** Write it up in under 100 words and put it on web

Principles	What's going Well?	What's a Challenge?
1. Observe + interact	5 years of using the best coop on the market, Eglu, showed me its limitations: Sitting on the	Plastic is not easy to shape.
2. Catch + store energy	good use of embodied plastic, barrel use hen heat.	Water catchment
3. Obtain a yield	eggs, compost, joy	
4. Apply self-regulation + accept feedback	Chickens regulate heat, in and out, dig, dust bath.	
5. Use + value renewable resources + services	man powered, manual labour, wood chip, wood slats.	Mesh needs bought. Expensive. Willow?
6. Produce no waste	food waste fed chickens, leftovers compost in woodchip, chickens turn. coop last decades	The paint can peel over time.
7. Design from patterns to details	Using the original pattern of the barrel to inspire the overall design and fitting details into it.	
8. Integrate rather than segregate	Whole self contained system	It's deliberately segregated from garden
9. Use small + slow solutions	encourages 2 chickens, even contained. eventually people will release them. First step	Its a big task to make a coop like this from scratch
10. Use + value diversity	Woodchip produces diverse worms and bugs chicken diet	Monoculture-chickens-enclosed
11. Use edges + value the marginal	Uses marginal land- concrete, paths etc. Woodchip increases edge. periodic release allos	chickens destroy gardens.
12. Creatively use + respond to change	very flexible design allows a broad use.	

#### Summary

The goal was to make a DIY plastic coop from waste that outperforms an Eglu and is beautiful.

Challenges: Eglu's perform well! They're hard to beat. 5 years of observation showed some possible improvements: Dropping tray gets damp; the coop, poop tray and run were a little too small. Woodchip also sprayed out the run. The door is fiddly. It's a tall order when waste plastic is so tricky to fabricate, let alone make beautiful!

The final design was informed by many **Permaculture principles (in bold)**. The use of the barrel as a coop **catches and stores** the embodied **energy** of the plastic and fabrication. The coop not only **produces a yield** of eggs but also well turned compost and pleasure. The hens body heat **self regulates** ventilation. They also go in and out the coop independently. The design gathers various unused **renewable resources** productively by using human skill as a key factor in fabrication. It deliberately finds use for waste woodchip, timber yard slats and reclaimed scaffolding planks. The whole system **produces no waste**, moreover it's designed to transform household waste into food. Food waste is fed to the chickens, whats left over composts in the woodchip, aided by the chickens 'turning'. Because the coop is attractive and plastic it will last for decades, saving on wasted coops. It's an **integrated** low maintenance system thats a **small and slow solution** for urban food production by **using the marginal** unused areas of peoples gardens, even concrete paths can be used.

There are areas of compromise: Its dependent on purchased mesh. The paint is purchased and will need touched up.. Construction is quite convoluted.