An estimated 400 billion square meters of fabric were produced globally in the apparel industry in 2015. Regrettably, around 15% of fabric ends up on the cutting room floor when garments are cut and sewn. Zero-waste is a design technique that eliminates waste at the design stage. There are various approaches to making a zero-waste garment, for example draping, knitting or using a zero-waste pattern. The number one rule is that there should be no wastage.

In this guide, we feature a zero-waste top designed by The EcoChic Design Award Alumni and Hong Kong designer, Angus Tsui. He provides insight into his approach, thought processes and gives tips to help you create your own zero-waste design. So let's dive in!

**THE ECOCHIC DESIGN AWARD**

**A DESIGNER’S GUIDE TO ZERO-WASTE**

WITH ANGUS TSUI

**MATERIALS**

- Sewing thread
- Ruler
- Tape measure
- Thread cutter
- Awl
- Fabric
- Pattern Paper
- Scissors
- Pins
- Pencil
- Rubber

**WAYS TO WASTE AT THE BEGINNING OF YOUR PATTERN**

1. I always start with fluid ideas in mind and let the fabric guide my creativity rather than the other way around, which is the usual approach. So, before I start designing, I measure the size of the fabric I'm working with. My ultimate goal is to use every inch of the fabric and I love how zero-waste challenges me, pushing my creativity.

2. Before starting on my pattern, I sketch out some potential design ideas. At this stage, the designs are preliminary as elements may change due to the size of the fabric. For example, the length of this top could become longer or shorter depending on how I lay out my pattern on the fabric. I like how zero-waste design can bring an interesting sculptural silhouette, which helps me create my own personal style.

3. When creating zero-waste patterns, I often turn to conventional pattern making books for references. For example, I look at the dimensions for the shoulders and armholes and use these measurements as the base from which I adjust my designs.

4. With a top, the body panels are my starting point as they take up the majority of the fabric. I explore different geometric shapes on paper to see how the pieces of the top could fit together most effectively on the fabric. I then look at the remaining area I have within my fabric dimensions and think of ways to make different design features using these pieces. For example, the ties for this top could be different lengths or widths depending on what is left over. If you decide to mass-produce with the need to create different sizes, you will have to recreate your patterns with new dimensions because you will not have any space for expansion if you are designing with zero-waste.

5. I then use fabric samples to mock up my design. From here, you can see whether you need any modifications. There is always lots of experimentation involved and it usually takes me around one to two days to produce a final pattern for reproduction.

6. Once I have my final pattern, I pin the pieces onto my fabric and cut. Then I sew the ties, next the back panel, then the front panel before finally joining all the pieces together. If you are adding your own print to your design, I would suggest cutting out your fabrics first before you do your printing so that it is easier to control the outcome.

Visit www.angustsui.com for more.

**ABOUT ANGUS TSUI**

Angus Tsui won the People’s Award in The EcoChic Design Award Hong Kong 2012 and The EcoChic Design Award 2014/15 Alumni Prize. Propelled by his victory, Angus launched his namesake sustainable fashion brand, ANGUS TSUI, in 2014. His womenswear collections are based on zero-waste design and he also up-cycles excess fabric stock from Hong Kong companies and social enterprises.

Angus continues to gain recognition for this work. He was selected as a ‘Black Sheep’ by the influential designer platform, Not Just A Label, based on his innovative and striking brand. His designs are much loved by celebrities, including the likes of Kary Ng, Raymond Lam and Shiga Lin, and he is regularly featured in the media, including Sing Tao Daily, SCMP Post Magazine, Milk Magazine, Cosmopolitan Hong Kong and ELLE Hong Kong.

Learn more about zero-waste design from experts, including Timo Rissanen, Johanna Ho, Daniel Silverstein, Ada Zanditon and Alex Law, in our ‘Zero-waste Design Technique’ guide here: www.ecochicdesignaward.com/learn

**WEBSTERS TOOLS**

- @EcoChicDesignAward
- @Redress_Asia
- @GetRedressed

Share your thoughts and experiences with us about your zero-waste designs!