

Till the Stars Come Down

Dorfman Theatre



Photograph of Final Model Box

Introduction

At the end of 2023 and early 2024 the National theatre began contracting their Artists to commit to deliver a show that meets Theatre Greenbook baseline standard. This all works towards the ambition of the National Theatre to be Net Zero Carbon by 2030. These reports are intended to capture anecdotal data that will feed into future practice and process when making large scale theatre to eventually deliver Advanced Greenbook standard as common practice. These reports are a documentation of both successes and challenges and are to be used as a tool for organisational learning and change – most importantly it will reflect the shared sense of environmental responsibility. NB: These reports are written post press night performance and by the completion of the run, with an opportunity for all parties involved in the delivery of the production to contribute.

Principal Artistic and Production Team

Director -	Bijan Shebani
Writer -	Beth Steel
Set and Costume Designer -	Samal Blak
Lighting Designer -	Paule Constable
Sound Designer -	Gareth Fry
Movement -	Aline David
Producer -	Tracey Low
Production Manager -	Chris Hay

Show Summary

Play tells the story of the wedding day of Sylvie and Mareck. Set in a former mining community in the north of England across multiple locations, a home, wedding reception, outside the reception, inside a wedding reception.

Data from Material Trackers

Department	Predicted Reuse	Reuse	TGB Standard Attained
Scenery	64%	46%	4% short of Baseline
Props	44%	74% (not including food)	Baseline (1% short of Intermediate)
Costume	50%	59%	Baseline

Design

Samal Blak (Set and Costume Designer) commented that due to the number of workshops this production had and being afforded that time, some elements of the set that were in the original design, were designed out. This highlights the need for more time in schedules and the design and making processes, to allow for sustainable thinking and working practice. Early design decisions for costume can be challenging, depending on the timelines associated with casting and the necessity for inclusive comms around the theatre green book and what the NT are trying to achieve, at the beginning of rehearsals. Off the back of this, we are including these comms in our rehearsal meet-and-greets, which we will continue to review and update.

Scenery

The scenery for Till the Stars Come Down was achieved with some reused scenic elements and materials. For the revolve, Construction were able to use an existing 3 metre revolve from storage, which was extended to 6 metres with a steel, spider-frame ring. These extensions were

made in a modular fashion so they will have more flexibility for future use; these will go into storage and can be used as a revolve extension on future productions.

The stage area surrounding the revolve and the treads were made up of majority stock steel deck and tread units, again from storage, with some custom-built timber infills to fit around the revolve itself. This is topped with reused flooring taken from a previous show (Death of England: Closing Time), however, the prediction made during costing about the quantity of reused sheets to be used on this production was too generous and we ended up using a lot less in reality, which impacted our materials tracker.

The floor covering for this show – artificial grass - needed a great deal of research, and Production Management were able to find an eco-artificial grass (sourced from Artificial Grass Direct) that can be fully recycled after use. However, the grass will go into storage after this show for use on future productions, as this will likely be used again.

A creative decision was made to use less water on this production, which meant material was not wasted in the production of a sump and drainage system that may have been cut later down the line, as well as the fact less water was ultimately used as well.

Construction built a circular lighting truss, and it was decided between them, the production managers and stage team to build it in a particular way that makes it more versatile and therefore reusable on future shows. However, the ramifications of this are that the piece required more virgin material than it would have otherwise. **The cost of working in a future proof way is in some instances, to use more material at point of initial build.** On this occasion, virgin plastic was used for the lighting ring, however because of this, Scenic Construction are looking into the possibility of using recycled acrylic sheet for similar application in the future.

Scenic Construction are continuing to search for more environmentally friendly metal paints, as it became apparent on this production that these are still not available.

The methodology used currently at the NT for measuring material usage, can mean a show with less scenery can be more challenging to achieve to baseline standard as there is less opportunity to reuse scenic elements. On a show where there are lots of walls and floor levels, it is possible to deploy more stock steel deck and flattage, which from a data point of view, seems more sustainable. Interestingly, this does go some way to prove that with enough modular, stock items in circulation, environmental design doesn't necessarily have to equal minimalism.

Props

The large, 2.1 metre banquet table that was used in the show had to be bought new by production management as it needed adaptations making which prohibited us from hiring this item. Props and production decided against making the table in-house as it would have made

the item very heavy which wouldn't have been practical for this production. Due to this, Props had to source new buffet tables as they needed to match the style of the banquet table. However, it was discovered during rehearsal that the tables weren't suitable so, Props ended up making the buffet tables from partially reused material. **From this Props learned, trialling how pieces of furniture will work on set and in the wings, before committing to a specific request would prevent us making unnecessary orders or producing waste if those items can't be returned – luckily in this case the tables were returnable.**

Where small props were bought new, this was either due to unsuitability of second-hand options – be that from NT stores, other stores, charity shops or online second hand retailers – or, due to late decisions that required fast delivery. The props team went to great efforts to find reusable options and to source responsibly where this wasn't possible. For example, the paper plates used are compostable, making them somewhat better environmentally than a cheaper option and props opted to buy individual plastic glasses instead of a batch box, to only buy what was need despite this being the more expensive option.

Sourcing and buying second hand, reused items take considerably longer which will require earlier design meetings and decisions, or more buyers during the rehearsal period to cover the workload quickly. **With a broader circular economy amongst local theatres, sourcing second hand items would be made much easier.** For example, in the search for clean, matching tablecloths, Props were unable to source anything second-hand that was suitable, forcing them to buy new, however, if it was possible to access a stock database of tablecloths from a wider pool of stores, this may have been possible to achieve second-hand.

There is food in the play, and it was decided early on that this would need to be real food, both aesthetically and because the actors would be eating it. As the meal was made with chicken, the decision was taken to use a vegan 'chicken' as purchasing this quantity of real chicken over the course of the run would not be a sustainable choice. As the show evolved during previews, Props found that a lot of the food was no longer being eaten in those scenes, so the decision was taken to replace the vegan 'chicken' with prop chicken, and this was agreed with the Director and the acting company. All real food that was not consumed during the show each night was disposed of via the NT's food waste streams, with none going into landfill. The playwright commented retrospectively, that had she considered the impact of the food both environmentally and financially when writing the play, she may not have written so much in.



Prop chicken with real vegetables in Till the Stars Come Down.

This is a wonderful piece of learning, embedding environmentalism into working practices too late into the process makes it difficult to overcome some of the challenges. **By embedding**

environmentalism from page to stage, a greater impact on overall carbon footprint will be achieved.

Costume Production

In the making of this show, the costume department discovered a new modern-day costume hire business based in London, which is well stocked and will be a useful, sustainable resource for future productions at the National.

The costume buyers made use of eBay and Vinted for this production, and the items procured second-hand will go on to have a further future life in the NT hire department.

It was noted on this production, that shows based in a modern era throw up more challenges in achieving theatre green book baseline standard than period shows, especially if set in a party/event. As found in Props, it was acknowledged that early design conversations and/or more staffing is vital in achieving at least baseline standard.

Wigs, Hair and Make-up

Wigs, Hair and Make-up (WH&M) successfully made a hairpiece for this production that matched the actress' natural hair using a combination of stock and new hair, which was sourced from a UK supplier. Procurement was managed carefully to avoid using questionable companies and for consumable items, local or UK suppliers were used. WH&M managed largely to shop by foot keeping the transportation at zero emissions. A lot of the prop make-up, hair products and tools were supplied from NT stock as well as the make-up and hair products that are used during the show.

WH&M endeavoured to use a single, more sustainable company to provide all the make-up and hair products, but as no one company makes a wide enough range of products, this is not yet possible. Not all items were possible to source locally, however local resources were exhausted first and foremost.

Lighting

Paule Constable (Lighting Designer) highlighted the existing work that's already been done by the building, i.e. the LED upgrade across all the theatres, which enables sustainable working within lighting.

No additional equipment was required to achieve the design which saved on transport emissions that would have been created from hiring more kit. Decisions were made early enabling the lighting department to purchase the materials for the practical lighting in one order, avoiding multiple deliveries. **When planning and concepts are signed off early, Lighting are more able to choose suppliers and materials in a sensible and sustainable way.**

Festoon, a mirror ball and Glasson light bulbs were purchased new for this production; however, these will go into storage and go on to have a future life in other productions.

National Theatre

The mounting method used for the LED ring meant that it got covered in offcuts of the fake grass, unfortunately making the intended re-use trickier.

Sound and Video

All sound equipment used on this show was reused from NT stock, and due to the fact there were no hires, no transport was used either. Reusable cable ties and bungees are used wherever possible to avoid using PVC tape.