

## Environmental Impact Report

Nye

Olivier 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 the 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 before 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 -	Rufus Norris
Writer -	Tim Price
Set Designer -	Vicki Mortimer
Costume Designer -	Kinnetia Isidore
Lighting Designer -	Paule Constable
Sound Designer -	Donato Wharton
Video Designer -	Jon Driscoll
Producer -	Rachel Quinney / Pádraig Cusack
Production Manager -	Jim Leaver

## Show Summary

The show centres around Aneurin (Nye) Bevan, Miner, and MP, during Churchill time. He was a Cabinet member for health and housing, instrumental in the creation of the NHS. The play is set in multiple locations, including family home and house of commons, but starts in 1962 Hospital ward and returns to this multiple times. The play depicts Nye's last days of life. He did not know he was dying. Was given morphine and therefore hallucinates, in Fantasia state, but Welsh, flashing back to his childhood, family and following political journey. His wife, featured in the production, Jennie Lee, later became a culture minister.

## Data from Material Trackers

Department	Predicted Reuse	Actual Reuse	TGB Standard Attained
Scenery	40%	66%	Baseline
Props	57%	64%	Baseline
Costume	74%	76%	Intermediate



## Design

Sustainability was embedded in the thinking around this design - keeping the conversation going was imperative in finding where progress could be made. Members of the artistic team noted Vicki Mortimer's (Set Designer) leadership around the green book agenda, and this manifested in continuous interrogation of the parameters throughout the process. The artistic team were very conscientious about the potential waste that can be produced from devised work. A successful way to mitigate for this was ringfencing time with the Director to have detailed discussions throughout, placing priority on items such as the beds, and being clear and setting boundaries around what was changeable during the rehearsal process. Inevitably, there was waste, however that waste was made from reusable components.

## Scenery

Early, constructive discussions were had around the floor and which material to use, taking into consideration the artistic, physical and environmental requirements for the show, which is also transferring to another venue. This enabled Scenic Construction to use part-Ecoboard and part-birch ply for the production, which was a compromise, but one that allowed them to make the show greener than it would have been had they used entirely birch ply. Throughout previews, the decision to use Ecoboard was reviewed, and it appears to be holding up well to the wear and tear of this show. Although there are good intentions to reuse birch ply wherever possible, Scenic Construction are finding that building a stock of birch is taking time and it's hard to come by externally, as some offers end up being unsuitable against the NT's health and safety standards. Therefore, there is an argument to say that the entire floor could have been made from birch-ply, which would have then gone on to be reused in a future production, despite the fact this would have pushed Scenic Construction to fall short of the TGB baseline standard on this show. As it was, Construction did meet baseline standard on this production.

Scenic Construction, Props and Production made a conscious decision to hire as much as possible with regards to the beds and only minimal additions/new beds were made as required. This was a deliberate discussion with the production manager and the props team - everyone worked together to make this happen.

Scenic Construction were able to look at drawings and then adapt them slightly to reduce the amount of new material and to use salvaged material in stock.

At least 70% of the floor was painted using a sustainable paint finish from Graphenstone. The other 30% was a Mylands black and glazed finish. The Scenic Art team found that Graphenstone 'green' was quite unstable to work with and Graphenstone generally hasn't worked brilliantly for the floor - the colour is quite volatile from the moment it's mixed making it very difficult to control the final finish. This meant Scenic Art had to tint the colour with Rosco paint, which turned out to be incompatible with the Graphenstone, as did the glaze used on top. The Scenic Art team are in dialogue with Graphenstone directly about these issues, and the company are working to find resolutions to them.

Construction have discovered that we are low on masking flats across the theatres, and they will be working now to increase stock of these. This will expend some carbon but will future proof reuse on future productions.

This show was quite a learning curve in Scenic Construction - what was seemingly a straightforward show that would easily hit baseline standard, threw up some interesting discussions that were had by all departments. The process would have been made easier with an inventoried stock of scenic elements to draw from, which the National Theatre doesn't yet have. This is something the NT will be developing from Summer 2024 with the opening of the new storage and hire department.

The metrics used to measure material usage are based on weight as per guidance from the Theatre Green Book, and this is not entirely representative of carbon impact, which was questioned in the tracking of this show. This is something that the teams are very aware of, however due to the complexity of capturing carbon emissions accurately across all production departments, the NT have adopted this methodology for the time being, in lieu of a suitable carbon calculator that captures whole cost. However, this is something that the NT are constantly reviewing and progressing.

## Props

Most of the beds were hired and this played a huge part in making the show green for Props. However, this did make it more difficult to adapt to rehearsal requests, as it limited what adaptations Props could make. Special fixings were created where they would usually have welded things on, and time will need to be allocated at the end of the run for the beds to be painted back to the original colour – **there is an additional time and resource cost to adapting hired items**. Environmental sustainability and health and safety took priority when sourcing elements for the beds, for example the bed boards which Props attempted to source second hand but couldn't find ply boards of good enough quality. The mattress foam was also sourced second hand, however as it was not fire retardant, Props couldn't use it. Props have negotiated with the company from who they sourced new foam and they will take it back to be recycled into 'chip foam' after the show, so the mattresses will go on to have a future life.

Many of the small props were sourced from NT stock. Where items couldn't be sourced second hand, this was usually due to a practical requirement, for example two walking sticks needing to be identical, or for health and safety purposes, for example oxygen masks that actors wear on their faces.

Vicki (Set Designer) was very understanding and flexible throughout the process, including during tech and previews, which enabled the Props team to deliver more set dressing, all sourced from stores, despite being under a time pressure.

## Armoury

For the motorised desk Armoury used wheelchair motors from an old Henry Hoover prop, which meant it only needed some wire extensions made up to adapt it, and a rechargeable battery used to power it, preventing the purchase of more batteries. The batteries and motor parts will be salvaged at the end of the show run to be used again on future productions.

## Costume Production

The show was a huge green book success for Costume, achieving 76% reuse and 89% future life. Kinnetia Isidore (Costume Designer) and Zoe Thomas-Webb (Costume Supervisor) both came with a strong desire to make a green book show and applied thought to every purchase, down to the hankies being bought from a discontinued line.

Period shows have a much higher chance of reaching green book standards, however the quality of many of the hired costumes did mean that Costume had to invest a huge amount of time into the repair and upkeep of the costumes. **Again, there is a time and resource cost that comes with adapting and maintaining second hand or hired items.**

## Wigs, Hair and Make-up

The main area of development regarding sustainability in Wigs, Hair and Make-up (WH&M) on this production, was the technique used to create the balding look for 'Clement Atlee'. WH&M decided not to use bald caps to achieve the bald element to the look. This was partly down to the request of the actor playing him but also to create the piece more sustainably, by creating an alternative option from layering fabrics and colouring them. **This meant less material was required and less wastage created.** This process and the techniques used were then transferable to the understudy piece, for which a stock wig was adapted to make both wigs required for the actress - the 'Clement Atlee' bald wig & the 'Matron' top piece that sits over the top.

WH&M found 29 stock moustaches for the show. Having team members in-house that can knot then meant WH&M could make the replicas/spares required. The understudy wig that Lee Mengo wears for Nye was the wig Michael Sheen wore for the photoshoot and trailer filming for the show. WH&M then adapted it for Lee to create his look for Nye.

WH&M were able to use a great deal of stock for this production. It would have been preferable to have made more of the new pieces in-house to help keep the carbon footprint down but on this occasion that wasn't possible.

## Lighting

For this production Lighting used the current Olivier basic lighting rig, which due to the recent re-fit of LED fixtures, meant Lighting only hired additional cable. However, as this will not be the case for the show's transfer to Cardiff Millennium Centre, Lighting will need to hire most of the lighting rig for the production there. **This highlights the need to explore transfer/touring considerations at the white card model phase so the impact of the design can be interrogated fully, and not just for the run at the NT.**