

# SUSTAINABILITY REPORT



**FILM AFRIKA**



# CONTENTS

**Introduction**

Foreword..... 3

Introduction..... 4

Production Summary..... 5

Overview..... 6

Environmental Sustainability Approach..... 7

**Sustainability Action Plan**

The Sustainability Deliverables Agreement..... 8

Communications Strategy Overview ..... 9

Communications Strategy Rollout.....10

    -Sustainability days of the Week.....11 - 15

    -Global Environmental Days.....16

    -Activation & Engagement.....17

**Sustainability Impact**

Key Indicators & PEAR..... 19

Departments.....20 - 26

Carbon Footprint – Scope 3 .....27

Waste Management.....28

Waste Management - Good Hope Centre Studio.....29

Wrapping Sets & Donations..... 30

**Research and Innovations**..... 31

Solar and Biodiesel..... 32

The Polyurethane challenge ..... 33

Acknowledgements and References..... 34

Photos.....35

Closing Statement.....36

# ABBREVIATIONS

<b>CTFS</b>	<b>Cape Town Film Studios</b>
<b>EMA</b>	<b>Environmental Media Awards</b>
<b>GHC</b>	<b>Good Hope Centre</b>
<b>GPG</b>	<b>Green Production Guide</b>
<b>GCG</b>	<b>GREENSET Carbon Calculator</b>
<b>IWMR</b>	<b>Integrated Waste Management Report</b>
<b>NPC</b>	<b>Non Profit Company</b>
<b>PEACH</b>	<b>Production Environmental Actions Checklist</b>
<b>PEAR</b>	<b>Production Environmental Accounting Report</b>
<b>PLUM</b>	<b>Production Lumber Material</b>
<b>PU</b>	<b>Polyurethane</b>
<b>SDA</b>	<b>Sustainability Deliverables Agreement</b>
<b>SFX</b>	<b>Special Effects</b>
<b>RBW S2</b>	<b>Raised by Wolves Season Two</b>
<b>RBW S1</b>	<b>Raised by Wolves Season One</b>
<b>tCO2e</b>	<b>Tonnes of Carbon Dioxide Equivalent</b>
<b>VFX</b>	<b>Visual Effects</b>

**Greenhouse Reporting Protocol**

**Scope 1:** Scope 1 emissions are direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).

**Scope 2:** Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. Although scope 2 emissions physically occur at the facility where they are generated, they are accounted for in an organization's GHG inventory because they are a result of the organization's energy use.

**Scope 3:** Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly impacts in its value chain. Scope 3 emissions, also referred to as value chain emissions, often represent the majority of an organization's total GHG emissions.

## FOREWORD

---

### David Zucker – Executive Producer

Not only can it be done, it is being done, and ultimately the message for all of us is that it must be done. The sustainability initiative implemented through excellent leadership, both on Season 1 and Season 2, governs every choice that is being made by this production team and the message is being taken home and shared with families and in communities. I really want to take what has been accomplished here and use that as an inspiration to other productions that we do elsewhere, and to point back to the success of what has been achieved here and say, not only is it possible but it is essential.

---



### Cheryl Eatock – Line Producer

We are the first generation to feel the impact of climate change and also the last generation that has the chance to really do something about it. You can make a difference. The whole team on RBW S2 was committed to reducing the carbon output on this production, and I am extremely grateful and very proud of the huge effort made by everybody. Season 1 of RBW was the first sustainability programme in the film industry in South Africa. RBW S1 supported the GREENSET training programme for Eco Stewards and funded the building of the South African Film Industry Carbon Calculator. Through hard work and dedication, Season 2 has piloted a ground-breaking solution for Polyurethane waste.

---



### Marisa Sonemann Turner – Film Afrika Head of Production

Film Afrika has supported the upskilling of young people in the film industry for many years through the SA Film Academy training programme. When GREENSET was launched as a branch of the SA Film Academy, it made sense for Film Afrika to support the implementation of sustainable best practices, while offering Sustainability Graduates training and employment opportunities in the film industry, first as trainee Eco Stewards and ultimately as Sustainability Coordinators. Sustainability is at the heart of all Film Afrika productions. The move to sustainability on set has only been possible through the support of our international production partners, to whom we owe a huge debt of gratitude.





Raised by Wolves S2 -Cape Town -2021 © Scott Free/ HBOmax

## INTRODUCTION

Raised by Wolves Season 2 began pre-production in a world changed forever by Covid-19; an uncertain world where immediate safety, before sustainability, was the key consideration for production. Only through the ongoing commitment to sustainability by Scott Free, HBOmax, Film Afrika, Line Producer Cheryl Eatock, Production Manager James Muringani and the production team, was it possible for RBW S2 to continue on the journey of sustainability started in Raised by Wolves Season 1. On RBW S1, Sustainability in Film was introduced, a baseline study conducted, followed by the implementation of a sustainability strategy: a first on a production in South Africa. On RBW S2 every crew and cast member worked towards a sustainable production from the very start of pre-production until the final day of wrap. The Eco Stewards calculated the carbon footprint using the GREENSET Carbon Calculator, a legacy project of RBW S1. Link to The RBW S2 Sustainability Story: <https://youtu.be/QdbAbN2pLsI>



**1 072 008**  
KWH  
Studio Power



**95%**  
LED  
Set Lights



**857 096**  
Plastic Bottles  
Avoided



**15 078**  
Meat-free meals  
Served



**240 028**  
Litres  
Petrol



**Zero**  
Idling Policy  
RBW S2



**81.7%**  
Decrease – RBW S1  
Paper Usage



**100%**  
Catering Packaging  
Biodegradable/Recyclable



**514 754**  
Litres  
Diesel



**50 hours+**  
Biodiesel and Solar  
Research  
Start of the innovation hub



**681.28**  
Tonnes  
Timber Repurposed



**100%**  
FSC Certified  
Paper & Set Timber



**1 116 989**  
KM  
Air Travel



**50%**  
Less  
Air Travel than RBW S1



**100%**  
Set Polystyrene  
Recycled



**20**  
Tonnes  
Recycled PU



**1 774**  
Production  
Bed Nights



**63%**  
Reduction in bed nights  
RBW S1 to RBW S2



**849.96**  
Tonnes  
Mixed Recyclables



**64%**  
Total Waste  
Diverted



**3 608**  
KL  
Water



**250**  
ML  
Per toilet flush only



**26**  
Charities & Schools  
Donated Materials



**All**  
Extra set food  
Donated

## INTRODUCTION OVERVIEW

The RBW S2 Sustainability Strategy involved working with departments to adopt a more sustainable approach to filmmaking addressing the three core elements of sustainability: (1) Environmental Responsibility, (2) Social Responsibility, (3) Economic Viability.

This was supported by HBO and HBO Max's Sustainability Production program, "HBO Green" and the use of the *Green Production Guide* to outline the sustainability approach for the various departments, in conjunction with the *Greenset Action Plan*. HBO Max, under WarnerMedia, is a member of the Sustainable Production Alliance which co-created and utilises the Green Production Guide tools to reduce the carbon footprint and environmental impacts on all its productions.

### (i) Green Production Guide Introduction

The Production Environmental Actions Checklist PEACH+ include practices each department can implement throughout production. PEACH also serves as an application for an Environmental Media Association Green or Gold Seal. RBW S2 has fulfilled the requirements, the production has been certified and internationally recognised as a 'Green Production' and has received a Gold EMA Seal for Sustainability in 2021.



### ***About the Production Environmental Accounting Report (PEAR)***

PEAR is a tool of the Green Production Guide and was used to track – Electricity, Fuel, Flights and Accommodation.

### (ii) Greenset Action Plan

The Greenset Action Plan is premised on six sustainability pillars that drive our area of focus and choice of actions.

**Create Awareness. Circular Economy. Waste Management. Greener Habits. Fuel & Energy. Greener Alternatives.**

The Sustainability Deliverables Agreement is the framework within which each department strives to reach its sustainability goals and targets.

Designating five sustainability days of the week is the method used to communicate the message of the six sustainability pillars to the crew and cast.

The Greenset Carbon Calculator is used to capture data for Scope 3 emissions for each department and accurately measure these carbon emissions.

Creating an awareness of the carbon footprint of each department allows them to proactively make choices that can lower the carbon footprint.

## INTRODUCTION

7

## ENVIRONMENTAL SUSTAINABILITY APPROACH

Raised by Wolves S2's environmental sustainability approach integrates all components of sustainability, to ensure that proper management and effective environmental and socio-economic impact as a whole can be reached.

### Approach

- Departmental engagement and effective communication addressed the over-arching aim to minimise the carbon footprint on RBW S2.
- Calculating the Carbon Footprint of RBW S2 aimed to create an accurate and detailed carbon footprint calculation on a production in South Africa.
- Problem Solving and Research:
  - (i) Identifying sustainability problem areas during the course of production, aimed to implement solutions to reduce waste to landfill and find solutions to environmental issues without delay during the production.
  - (ii) Research & Development focusing on how to reduce the three largest contributors of carbon on the production, aiming to minimise the carbon footprint and the environmental impact of the production.
- Focusing on upskilling and training Eco-Stewards and Green PAs, creating a sustainability department that supports Production to develop and reach sustainability goals and targets.

### **What is an Eco-Steward?**

An Eco-Steward is the sustainability lead on a production who develops a comprehensive sustainability strategy, working closely with departments to reach their sustainability goals and targets. The Eco-Steward is responsible for communicating the sustainability strategy and collecting data for the carbon footprint calculation, while working to minimise the environmental impact of the production through the implementation of economical green initiatives and innovation towards carbon reduction.

### **What is a Green PA?**

A Green PA works with the Unit Department to coordinate and minimise waste on set, at basecamp and on the studio backlot. Included are the implementation of recycling systems, the placement of signage and ensuring an effective three-bin waste system. The aim of the Green PA is to divert at least 70% of the waste generated on the production from landfills through recycling, composting, repurposing and donations.

## SUSTAINABILITY ACTION PLAN THE SUSTAINABILITY DELIVERABLES AGREEMENT

During pre-production, the Eco-Stewards met with all departments to discuss sustainability on RBW S2.

The *Sustainability Deliverables Agreement* - an agreement to work towards the **goals and targets** identified by each department - was signed by each department and by the Line Producer, Cheryl Eatock.

The Sustainability Deliverables Agreement for each department was created by looking at the **PEACH best practices**, the **HBO sustainability best practices** and the input from the engagements with each department.

### Environmental Goal 1: Minimize Carbon Output through behavioural change

- Reach every cast and crew member, including extras and dailies, with the message of sustainability and environmental best practices.
- Work with departments to build their green suppliers list.

### Environmental Goal 2: Accurately measure the carbon output of RBW S2

- Accurate Carbon Footprint Measuring and input of data into the PGA Green Tools assisted
- Additional scope 3 data input into the the GS Carbon Calculator.

### Environmental Goal 3: Divert 70 percent of the waste from landfill

- To recycle, compost or repurpose majority of the waste.
- Proactively research and implement solutions for the recycling of Polyurethane.

### Environmental Goal 4: Proactively reduce the Fuel and Energy consumption by implementing alternative energy sources.

- Active ongoing research and, where possible, implementation of renewable energy models and bio-diesel.
- Continued messaging and reminders of “No Idling” policy and “Switch Off” policy, by dedicating a day of the week to energy minimisation.
- Measure number of people carpooling/using the shuttle to work vs. number of people traveling on their own.
- Accurate measuring of fuel spend (Rand value, Fuel Type). Track the effect of Covid-19 related fuel spend separately.

### Environmental Goal 5: To influence the departments to construct sets with a positive contribution towards circular economy

- 30 % of the set builds to be stored for future seasons or repurposed.
- Track and measure the Ratio between ‘rented vs purchased’.
- Track and measure how much will be donated to charity.



**Environmental Goal 1: Minimize Carbon output through behavioural change**

## SUSTAINABILITY ACTION PLAN COMMUNICATIONS STRATEGY - OVERVIEW

Creating awareness is crucial in the climate change movement because people often question the validity of its existence. The challenge was to effect behavioural change by educating the crew on the environmental best practices implemented on set and what they can do in their individual, departmental and production capacity, to have a positive environmental impact in their communities.

The Communications Strategy is based on the Greenset Sustainability Pillars, environmental best practices, and ongoing feedback from the crew.

Sustainability messaging was distributed via email memos, posters at communal spaces, banners, the sustainability e-Pledge and sustainability mural, WhatsApp gifs, The Green Wolf of the Week Award, limited one-on-one engagement and call-sheets.

**The types of engagements we received:**

- Suggestions on green initiatives to implement
- Red flags (Sustainability issues that required an immediate responses)
- Positive or negative feedback on the green initiatives implemented, which we take seriously and work towards addressing.



## SUSTAINABILITY ACTION PLAN COMMUNICATIONS STRATEGY - ROLLOUT

600+ crew members were active on the RBW S2 - GREENSET Hotline. This hotline was used as a direct channel to provide feedback and engagement around sustainability. The hotline was most effective in reaching the construction labour force who don't receive email distribution.

Covid-19 protocols limited in-person engagements but adopting a more digital approach created a channel for the crew to reach the Sustainability Team.

### RBW S2 SUSTAINABILITY PLEDGE

The RBW S2 Sustainability pledge forms part of a global best practice and unites the crew and cast in support of sustainability. Due to Covid-19 Protocols, the pledge was released digitally via email and WhatsApp.

A Sustainability pledge board was placed at basecamp as a visual reminder to sign the digital sustainability pledge.

### RBW S2 FEEDBACK SURVEYS

Online surveys were distributed to get feedback from to cast and crew during each block of filming. The surveys were to evaluate the impact and effectiveness of the sustainability measures implemented on RBW S2.

#### Results from Feedback Surveys:

97.1% of the respondents indicated that they received memos, and WhatsApp messages about sustainability.

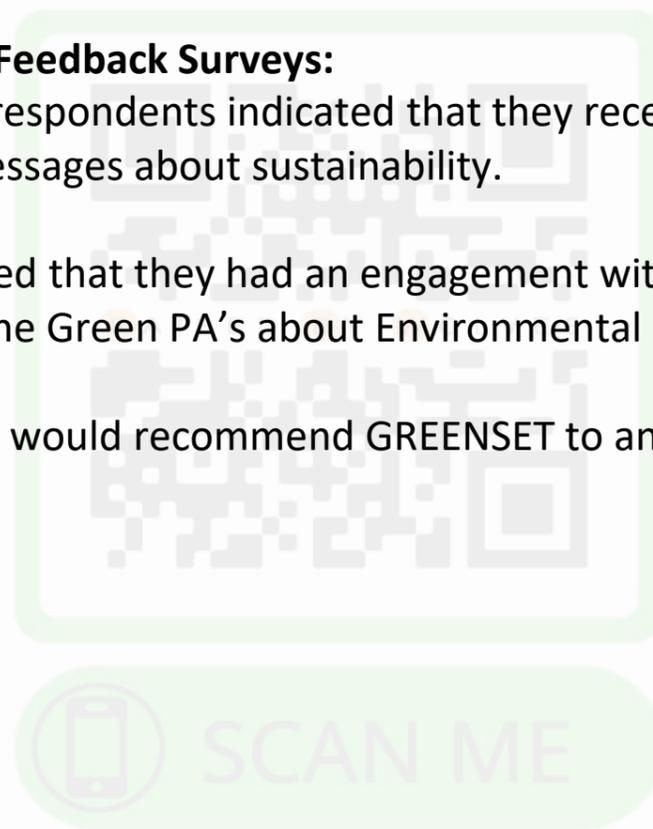
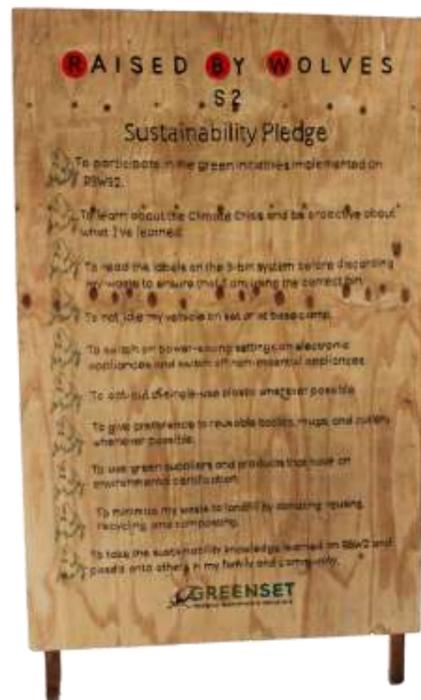
67.7% indicated that they had an engagement with either the Eco-Stewards or the Green PA's about Environmental Sustainability

94% said they would recommend GREENSET to another production

#### RBW S2 Sustainability Pledge

The Sustainability Pledge is a way to acknowledge that you're aware of the Climate Crisis and understand what you can do to reduce your environmental impact on set and at home!

Click Here to sign  
RBWS2 Sustainability pledge



**SUSTAINABILITY DAYS OF THE WEEK**

**SUSTAINABILITY PILLAR NO 2 – CIRCULAR ECONOMY**

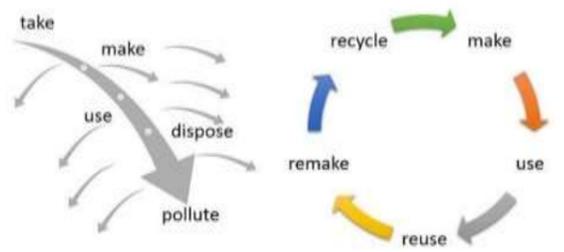
**11 SUSTAINABLE CITIES AND COMMUNITIES**



**Circular Mondays**

Sustainable Development Goal

**LINEAR ECONOMY vs CIRCULAR ECONOMY**  
The transition from a linear to a circular economy requires a joint effort by stakeholders from all sectors



A Circular Economy is one in which waste and pollution do not exist by design, products and materials are kept in use, and natural systems are regenerated



**#circularmondays!**  
The Earth's resources are not limitless. We need to move beyond a 'take, make, dispose' economy towards one where all materials are treated as precious resources, with nothing thrown away

- What can we do in the Film Industry**
- Design Smart Sets so that they can be reused
  - Innovate with new Green building materials
  - Buy products with a Green Certification
  - Give preference to rentals and buy-back options
  - Refine waste-streams into collections of items for reuse
  - Donate all waste into an up cycle stream
- Circular Innovation is creating change, if you have an idea share it

A transition to a circular economy in Africa will deliver economic growth, jobs and positive environmental outcomes.

The Eco Stewards worked with departments to create an enabling environment for economic development and skills development through diverting as many waste streams from landfill as possible and identifying organisations, charities and SMEs that could benefit from the waste and material donations from RBW S2.

Through the efforts made by the construction team and the Green PA's collecting timber off-cuts from the skips on site at GHC and CTFS a total of 102.21 tonnes of timber was diverted from landfill during prep and principal photography. An additional 579.075 tonnes of wood was donated to charity from the breakdown of sets.

Follow link to see a list of beneficiaries 

**Circular Mondays**

**Turning Trash into Cash**



This is an example of how a waste stream (tin can clips) can be turned into a new product (upcycled belt) that generates income.

A big part of the circular economy is feeding what would have been a waste stream into the economy again to be reused or remanufactured.

**Circular Mondays**

**Do you have any Eco-Bricks?**

In Partnership with the City of Cape Town, the Natural Building Collective has designed and is busy constructing a sustainable building!

This building is located in the beautiful Helderberg Nature Reserve and is purposefully designed to serve as an educational facility and multi-purpose center for the City of Cape Town and Cape Nature.

**Do you have any Eco-bricks you want to donate?**  
Contact the GreenSet Hotline: +27 (72) 178 3526



**Circular Mondays**

**100 TONNES!**

Through RBW2's Circular Economy initiatives, we've donated over 100 tonnes of timber offcuts that otherwise would've been sent to landfills!

The wood donations have gone to so many incredible organizations that work with youths from disadvantaged backgrounds. Township food gardens and community rehabilitation camps have also made great use of the wood offcuts!

Do you have a DIY project and could make use of Wood Offcuts?  
Contact Zues for assistance! Cell: 078 197 9299  
Email: zusiphe.greenset@gmail.com



#TheCircularEconomy

**SUSTAINABILITY DAYS OF THE WEEK**

**SUSTAINABILITY PILLAR NO 4 – GREENER HABITS**



**14.5% OF GLOBAL GREENHOUSE GAS EMISSIONS ARE A RESULT OF MEAT CONSUMPTION.**

**HERE ARE THE TOP 3 REASONS WHY YOU SHOULD HAVE A MEAT-FREE DAY:**

**FOR YOUR HEALTH**

Replacing meat with plant-based proteins is a great way to gain energy and prevent disease.



**FOR THE ANIMALS**

You will save animals by reducing the demand for mass-scale animal farming which is inhumane and harmful to animals.



**FOR THE PLANET**

Choosing one Meat-less meal a week reduces air and water pollution and means less exploitation of land, water and other scarce natural resources.



#Meatfreetuesdays

MEAT FREE MONDAYS is a global movement which proactively encourages people to go meat free one day of the week. RBW S2 decided to go MEAT FREE on a Tuesday.

RBW S2 had a total **21** meatless days during Principal Photography, resulting in approximately **15 078** meatless meals out of a total of **76 826** meals served based on 2 meals a day.

Backstory

South Africa is known for its excellent quality meat products, the carbon footprint of beef in SA is less than that of developed countries. South Africans love to eat meat. It was particularly difficult to encourage crew to go MEAT FREE one day of the week. This activity resulted in negative pushback, particularly from crew. The Eco Stewards constantly engaged with the crew to highlight how the consumption of meat had increased in the last decade and the negative effect that the excessive consumption of meat was having on their health and the planet.

**MeatFree Tuesdays**

**ONE DAY A WEEK CAN MAKE A WORLD OF DIFFERENCE!**

Why does RBWS2 have Meat-Free Tuesdays? It's good for the planet, helps to boost our health, reduces animal suffering, and helps protect our biodiversity.

Meat Free Days are a global trend in the film industry, and if you want to see the difference you're making today, follow the link below to calculate how you can have a positive impact by eating less meat and dairy.

**Impact Calculator**  
<https://meatfreemondays.com/calculator/>

Whether you eat meat or not, you can be part of this decision to limit the meat industry from destroying our planet's resources.  
-Stella McCartney

**#MeatFreeTuesdays**

**RAISED BY WOLVES** **GREENSET**

**MeatFree Tuesdays**

**Love Donuts? Try a Vegan One!**

Vegan donuts are healthier than regular donuts because their recipes call for healthier sweeteners such as maple syrup or even dates.

Mouth-watering vegan donuts prove that you don't need animal products to bake some truly tasty vegan doughnuts! Try some vegan donuts today. You won't regret it!

A hotspot for vegan donuts is Grumpy and Runt. They're a little deli based in Cape Town that offers a great variety of world-class, tasty vegan donuts.  
#Vegandonuts

**RAISED BY WOLVES** **GREENSET**

**MeatFree Tuesdays**

**Your Protein in CO2**

The meat and dairy industries create 7.1 billion tonnes of greenhouse gases annually - that's 14.5% of total man-made emissions!

Greenhouse gas emissions per 100 grams of protein.

Protein Source	GHG Emissions (kg CO2e)
Beef (beef herd)	48.09
Lamb & Mutton	19.09
Pork (stewed)	11.14
Beef (dairy herd)	10.81
Cheese	10.82
Pig Meat	7.81
Fish (stewed)	5.98
Poultry Meat	5.7
Eggs	4.21
Tofu (soybeans)	1.98

The best way to significantly reduce your Dietary Carbon Footprint is to switch to a plant-based diet. But, if you want to take small steps, eating less meat or switching to lower impact meats such as chicken, eggs, or pork is the second-best way for you to reduce your dietary carbon footprint.

**RAISED BY WOLVES** **GREENSET**

SUSTAINABILITY DAYS OF THE WEEK

SUSTAINABILITY PILLAR NO 3 – WASTE MANAGEMENT



In South Africa, only 10% of waste streams are recycled and the other 90% is sent to landfills. Use the Waste Hierarchy to reduce your waste to landfill.

**REFUSE**

goods that contain excessive plastic packaging and parts. Choose greener alternatives such as glass jars/bottles and material bags.

**REDUCE**

single-use items whenever and wherever possible. If it can't be REUSED or RECYCLED? REFUSE IT!

**REUSE**

durable, straws, utensils, containers, bottles, bags, and other everyday items. REUSE items as much as you can before you RECYCLE them.

**RECYCLE**

what you can't refuse, reduce or reuse. Look for the polymer code on your packaging. The numbers 1 to 7 are all RECYCLABLE.



#Wastelesswednesdays

Waste-less Wednesdays go hand-in-hand with Circular Mondays. All departments made a huge effort to waste less and to use the 3-bin system.

The catch phrase on Wednesdays was: *Recycling is on the right because it's the right thing to do, organic green is in between, and landfill is on the left because it's the last option left!*

All inputs were targeted, for example through using sustainable inputs (Greener Alternatives) the Catering Department was able to reduce it's outputs and 'waste less'. Secondary recycling methods, such as composting and repurposing were supported by the Cape Town Film Studio, the Green PA and the Unit and Transport Department.

In the feedback survey distributed towards the end of production, respondents gave the waste management plan implemented on set a "Thumbs Up".

**Make RBW2 a Paperless Production**  
840 million trees are planted over 693,000 hectares in South Africa for papermaking!  
Call sheets get distributed digitally, so instead of asking for printouts, try to view your call sheets electronically.  
Manufacturing paper products produce greenhouse gases, causing deforestation and global warming. Recycling can offset some of the environmental impacts, but not by much because most paper eventually ends up in a landfill.  
Could you go an entire week without printing your Call Sheet?  
**Take the challenge!**  
save paper, save trees, save the planet

**Disposal of Grey Water**  
Only rainwater should go into the stormwater drains at CTFS because the water streams are connected to the natural wetlands.  
When greywater is released into rivers or lakes, it pollutes our precious waterways, and this is why it is essential to follow the correct disposal methods when working with greywater.  
If your department generates greywater, please ensure to discard it inside the flow bins provided to you by the Locations Department.

**Organic Waste**  
What should go in this bin...  
Teabags  
Compostable cups  
Food scraps/left-overs  
Compostable coffee cups  
Egg Shells  
Compostable food containers  
*Compost green is in between!*

**SUSTAINABILITY DAYS OF THE WEEK**

SUSTAINABILITY PILLAR NO 1 – CREATE AWARENESS

**GREEN WOLF**

**Green Wolf of the Week**

The Green Wolf of the week award aims to positively reinforce Greener Habits amongst the cast & crew.

We all need to take responsibility for our impact on our environment while on set and when we go home because every action counts!

Help the Producers of RBW2 get a Gold Seal from the Environmental Media Association by participating in the various green initiatives implemented on set and at the Cape Town Film Studios.

The Green Wolf of the Week Award is a small thank you and acknowledgment to the cast & crew who go the extra mile to make a big impact.

**Here's how you can win!**

- Sign the RBWS2 Sustainability Electronic Pledge
- Encourage your fellow crew members to work towards the environmental goals and targets
- Participate in the green initiatives on set and at base camp



The Green Wolf of the Week award positively reinforced Greener Habits amongst the cast & crew as well as offering a small “Thank You” and acknowledgment to those who “go the extra mile” to make a big impact. The Green Wolf of the Week also acted as a fun way getting cast and crew involved in some healthy competition for the sustainability initiatives in their departments, on set and at base camp.



**Golden Wolf**

The Golden Wolf is a trophy awarded to a Department that has made a significant contribution towards sustainability on RBW S2.



**SUSTAINABILITY DAYS OF THE WEEK**

**SUSTAINABILITY PILLAR NO 5 – FUEL AND ENERGY**

Fridays focused on reducing power wastage wherever possible.

All departments were encouraged to buy energy-efficient appliances with an A+ rating, switch off and unplug appliances that are not in use, and reduce energy wastage where possible.

Notably **95%** of the lighting on RBW S2 was LED lighting.

The production implemented a policy of no idling.

The Eco Stewards working with the departments conducted ongoing research into the decarbonization of the film industry, exploring options such as biodiesel and solar energy.

A mini-solar charging station was set-up at one of our shooting locations which charged comteks, batteries, cell phones, and the security hut lights.

Studies indicate that the Film Industry is responsible for as much carbon as the airline industry. In South Africa the largest contributors to the carbon footprint of a production is Electricity and Fuel.

**7 AFFORDABLE AND CLEAN ENERGY**

**PLUG-OUT FRIDAYS**

Sustainable Development Goal

South Africa is the world's 14th largest emitter of greenhouse gases (GHGs). Its CO2 emissions are principally due to a heavy reliance on coal.

Use the following tips to reduce your Fuel and Energy Consumption:

- SWITCH-OFF & UNPLUG**
- DON'T IDLE YOUR CAR ON SET OR AT BASE CAMP**
- BUY ENERGY-EFFICIENT APPLIANCES**
- USE LED LIGHTING**
- SWITCH OFF YOUR VEHICLE A/C WHEN TRAVELING SHORT DISTANCES**
- USE RENEWABLE ENERGY**

**TAKE ACTION #PLUGOUTFRIDAYS**

**PLUG-OUT FRIDAYS**

**Eskom Se Push**

Invest in solar energy today and save yourself from having to take cold showers when there's load-shedding.

By having a solar geyser, you will benefit from having hot water when others don't (Load-shedding)!

Another great benefit of using a solar geyser is that the energy is free and renewable. Also, solar geysers continue to heat water even on cold and cloudy days.

*#Solar\_is\_Lekker*

**GREENSET**

**PLUG-OUT FRIDAYS**

**STOP IDLING - SWITCH OFF YOUR ENGINE**

**RBW2 is an Idle free Zone**

If every driver avoided idling for just five minutes, we could prevent more than 6,000 tonnes of CO2 from entering the atmosphere every year.

Idling is not always a conscious decision, so next time you're waiting for a cast or crew member, just check to see if you're idling and turn it off.

With fuel-injected engines, ten seconds of idling burns more fuel than restarting your engine!

**GREENSET**

**PLUG-OUT FRIDAYS**

**ELECTRIC VEHICLES LOADING...**

The first-ever Tesla Model X can now be spotted on South African soil!

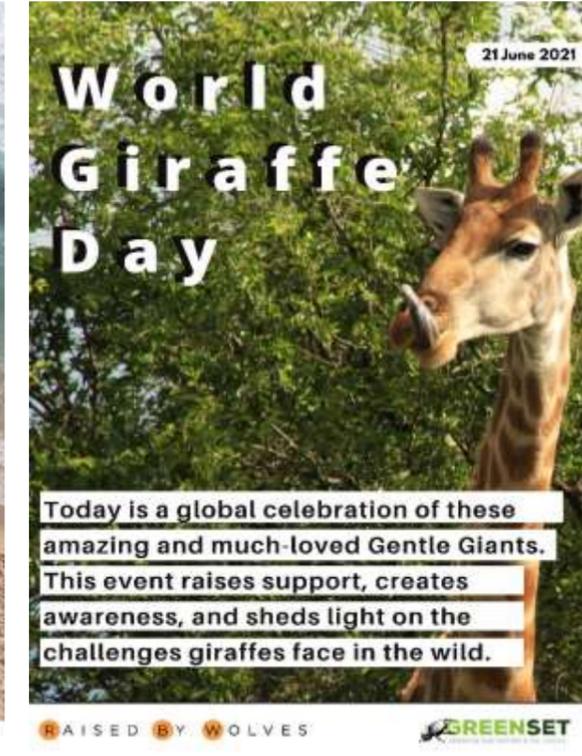
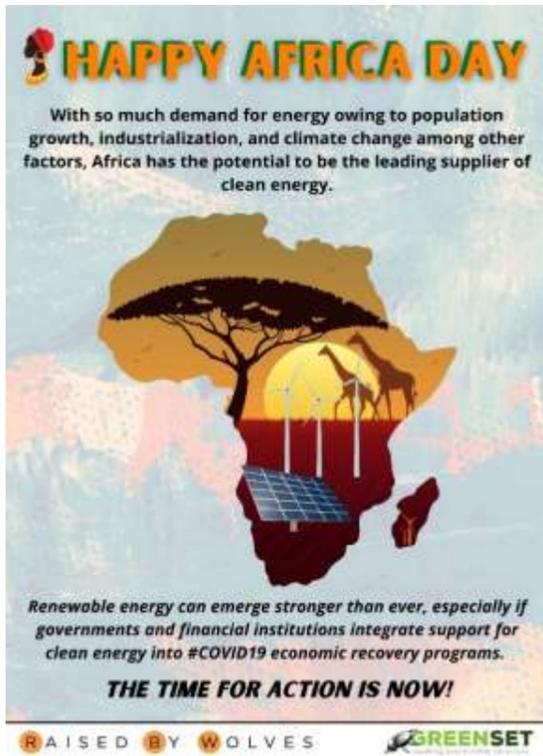
Electro-mobility in South Africa is fast becoming a reality! With more car brands creating Electric Vehicle (EV) options, consumers can now buy electric vehicles from MiniCooper, Lexus, BMW, Toyota etc.

Electro-mobility is a crucial step towards transforming our transport system, both public and private, to a more sustainable one where fossil fuels are a thing of the past!

Look out for the new Tesla Model X

**GREENSET**

**GLOBAL ENVIRONMENTAL DAYS**  
SUSTAINABILITY PILLAR NO 1 – CREATE AWARENESS



**Earth Hour:**

In celebration of *Earth Hour* that took place on Saturday, March 27, RBW S2 joined the global movement to show solidarity by switching off non-essential lights and lighting a candle on Friday, March 26th between 12 PM - 13 PM. Earth Hour is more than a symbol of support. It's a catalyst for URGENT change!

**Earth Day Competition:**

For Earth Day, RBW S2 held a competition where cast and crew could enter and win a reusable coffee mug by submitting three things they do that help protect our environment everyday.



Tuscany Rhys



Felix Spies



Lauren De Hart



Solule Mbethe



**ENGAGEMENT AND ACTIVATION**

SUSTAINABILITY PILLAR NO 1 – CREATE AWARENESS

# GREEN WOLF KIDNAPPING

The Green Wolf became a hot topic amongst cast and crew during Principal Photography. The GREEN WOLF trophy was kidnapped and held for ransom by an eco-vigilante group called the “concerned citizens of Kepler 22-B”. A list of demands - to go greener - was sent to Production.

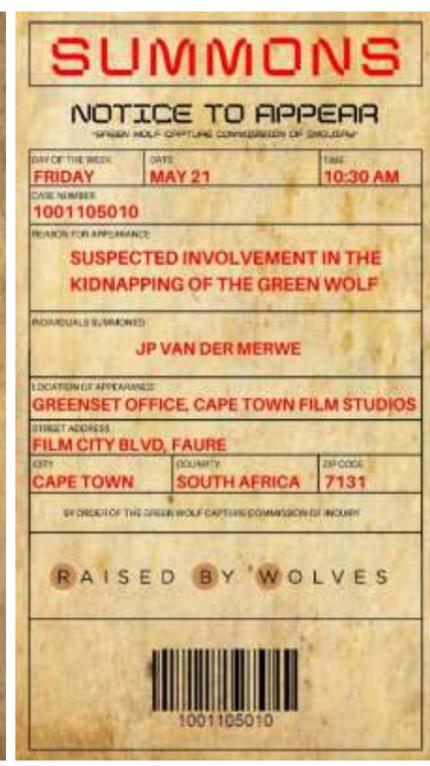
Upon investigation, a suspect was identified and then later summoned to a court hearing to flush out the rest of the eco-vigilante group and the wolf’s location. After playing the game and getting the cast and crew involved the wolf was returned home safely.

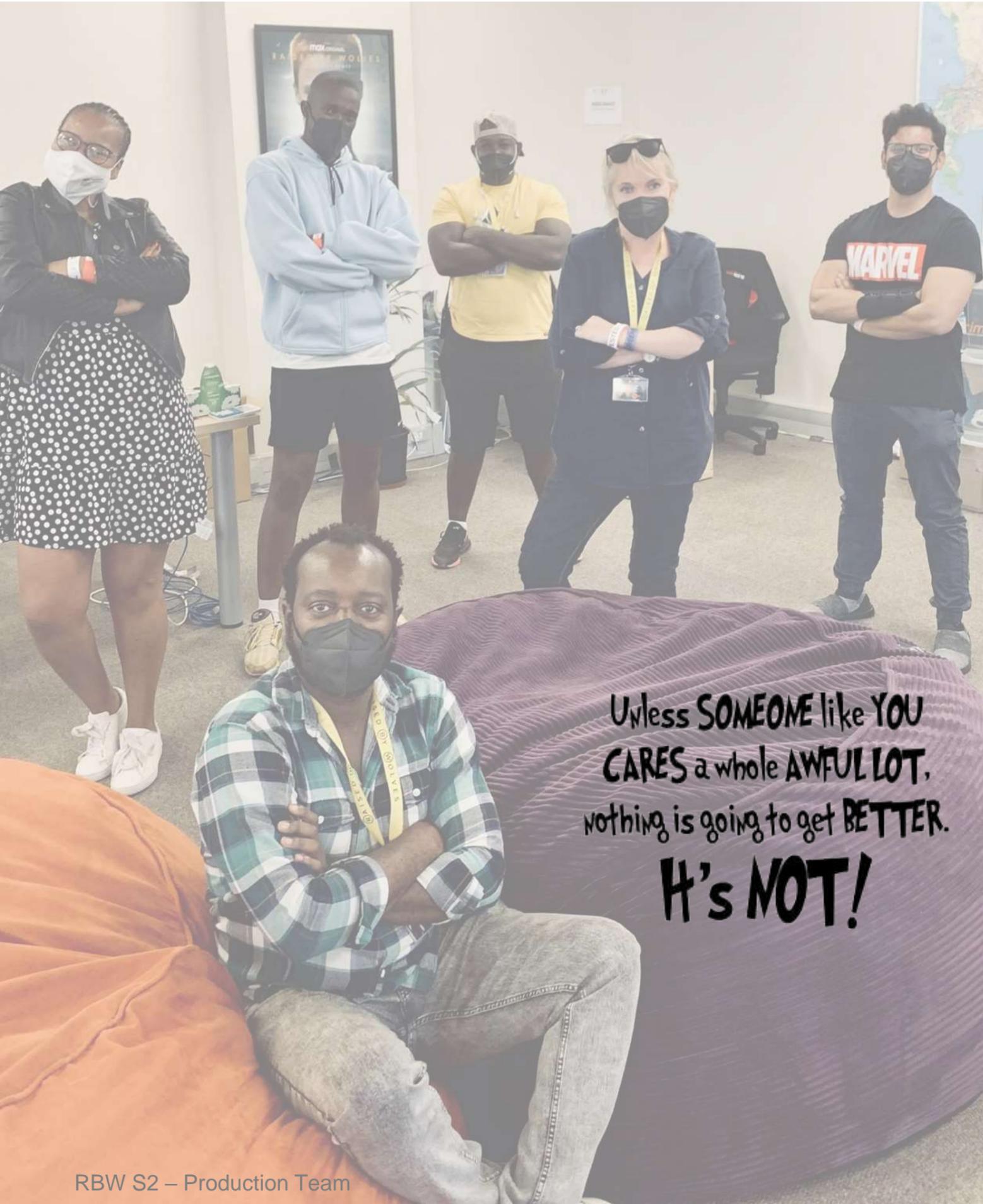
# CAST KIDS

The Eco Stewards set-up a fun sustainability themed game with the younger cast throughout Principal Photography. The cast kids were all given an Eco-Bingo Card with various green initiative tasks to complete both on set and at home for the duration of RBW S2.

Each completed bingo-card received a biodegradable eco-coffee cup as a prize.

There were a total of 6 winners for the Eco-Bingo Card.





Unless **SOMEONE** like **YOU**  
**CARES** a whole **AWFUL LOT**,  
nothing is going to get **BETTER**.  
**It's NOT!**

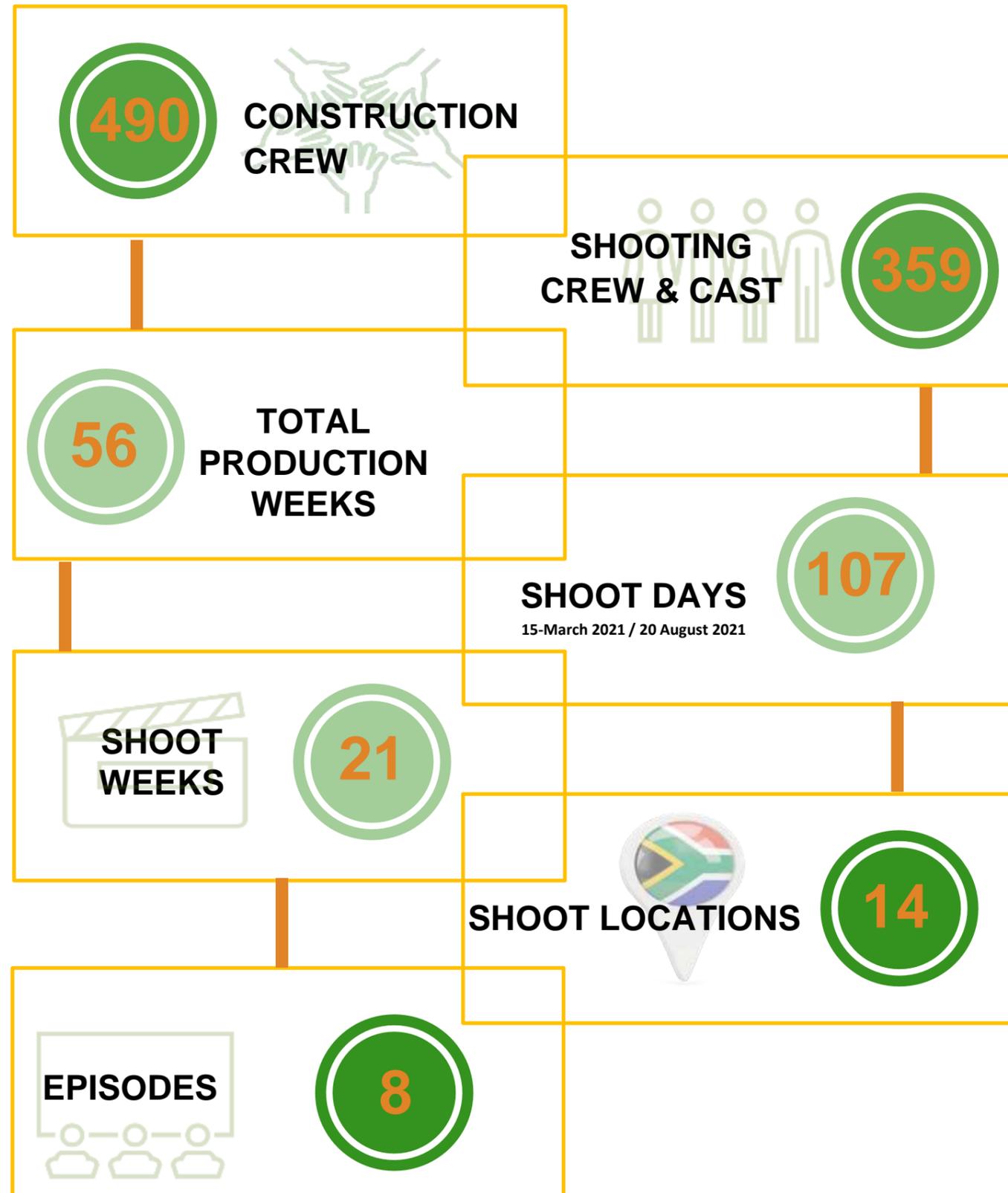
RBW S2 – Production Team

## IMPACT & EFFORT



GREENSET - RBW S2 - August 2021

## KEY INDICATORS



## CARBON OUTPUT

**3186**  
Tonnes MtCO<sub>2</sub>e

**PEAR - CARBON FOOTPRINT**

*The following Key Environmental Indicators were measured using PEAR*  
 Scope 1: Fuel used by fleet vehicles, Diesel used in generators to power set and basecamp.  
 Scope 2: Electricity.  
 Scope 3: Flights & Accommodation

### SHOOT LOCATIONS

62 Days	Cape Town Film Studios
16 Days	Good Hope Centre Studio
14 Days	Springfontein Beach
06 Days	Kalbaskraal
06 Days	Grabouw MTO
05 Days	Boschendal
05 Days	Kogel Bay
04 Days	Millerspoint
03 Days	Wiesenhof Farm
02 Days	Lourensford Farm
02 Days	Cederberg
01 Days	Soutwater Beach
01 Days	Bilton Farm
01 Days	Telkom Towers

Including 2<sup>nd</sup> Unit

## SUSTAINABILITY IMPACT

### Production and Accounts

The Production Department were instrumental in the transition towards a more sustainable production through the full support of the Greenset training program and the Sustainability Department on RBW S2. They set the standard for sustainability across all departments, bringing on green suppliers where possible and working with the Eco Stewards to create behavioural activations and interventions. For example, switching to biodegradable packaging and taking the initiative on behalf of the entire Film Industry, to fund a Polyurethane report and a Polyurethane recycling machine. This is a first for the South Africa Film Industry and is a huge step forward in reducing the carbon footprint and waste to landfill on large productions.

RBW S2 made a considerable effort towards being a paperless production and as a result, there was a **81.7%** decrease in the amount of paper used compared to RBW S1. The use of Digital Purchase Orders ensured that RBW S2 moved away from printed invoices and Accounts Department processed all crew paperwork using *Crewstart*.

#### Statistics - Docusign:

- Waste saved = 0.38 tonnes
- Trees/wood = 2.36 tonnes
- Freshwater = 52.622 kilolitres
- Carbon saved = 5.59 tonnes



### Travel

A total of **1 116 989 km** of air travel was recorded - **149 MtCO<sub>2</sub>e**

That's 27.9 times around the world.

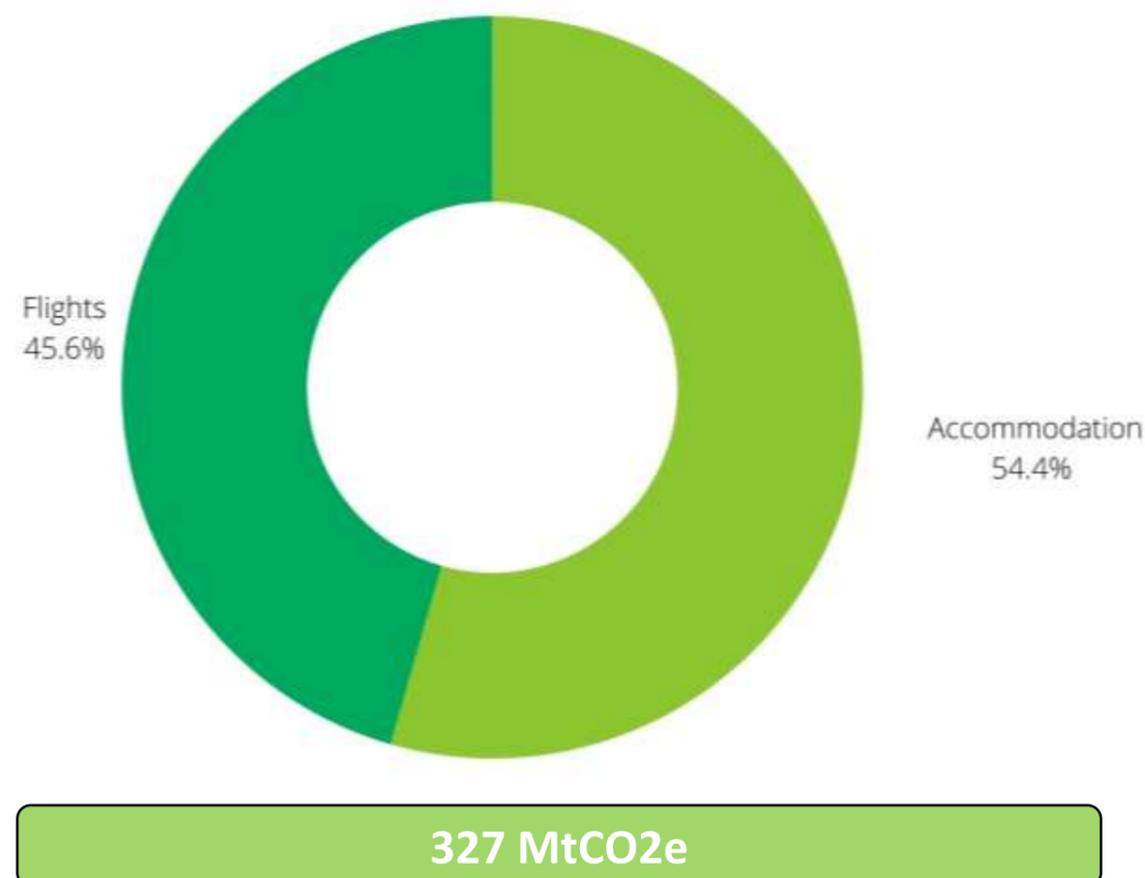
*This is half the total of air miles travelled during RBW S1 - 2 116 596 Km.*

### Accommodation

A total of **1 774** bed nights - **178 MtCO<sub>2</sub>e**

*A 37% reduction compared to 4 764 bed nights on RBW S1.*

TRAVEL & ACCOMMODATION DEPARTMENT



### Unit - Transport and Locations:

The Unit/Transport and Locations department has the highest carbon footprint, despite the efforts made to reduce the overall consumption of fuel and energy.

Green initiatives implemented by Unit/Transport and Locations:

- Energy efficient Fresh Unit Trailers
- Single-flush mobile toilets designed to use only 250ml of water per flush were used on set and at basecamp.
- Bluewater trailers and water pods.
- Mini solar station used at one of the shooting locations.

The Unit HODs attended brainstorming sessions to explore renewable energy sources to reduce their dependence on fossil fuels for generators. Their invaluable contribution has led to the designing of energy models to decarbonize the local film industry.

The Production Department took the initiative to supply cast and crew with reusable water bottles and coffee flasks - limiting the amount of single use plastic water bottles. A total of **857 096 x 330ml** single-use plastic bottles were prevented from use on RBW S2.

Clinton Du Preez (*On set Unit Manager*) is one of the first Unit Managers to embrace the idea of having Green PA trainees as an integral crew member in the Unit Department. The Unit/Locations Team at the Good Hope Studios supported the Green PA and the implementation of sustainable best practices.



### Fuel

Fuel – including diesel for generators and trucks and petrol/gasoline for cars and utility vehicles equated to **1945 MtCO2e**.

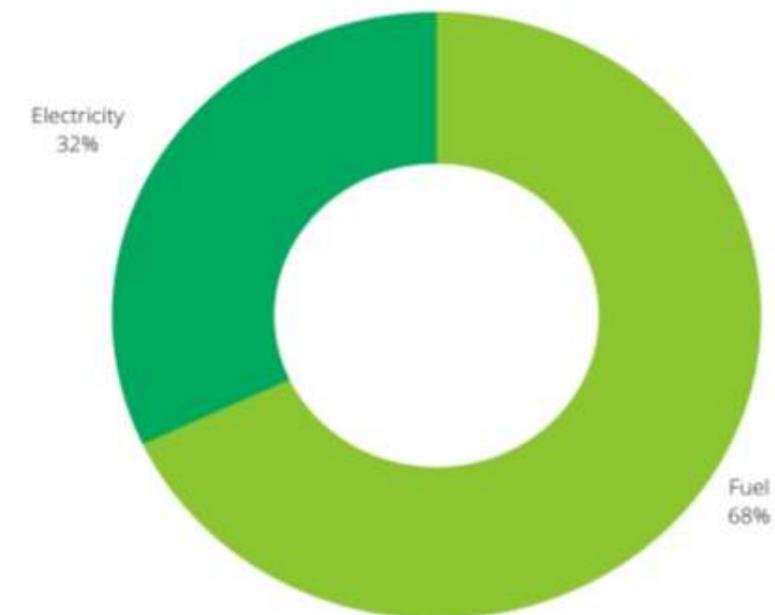
A total of 240028 litres of petrol/gasoline and 514754 litres of Diesel Fuel was used in the making of RBW S2. This is as a result of diesel generators used to power the basecamps and sets at all distant locations. Covid-Fuel costs added to the overall carbon output.

### Electricity

Electricity usage equated to 914 MtCO2e. A total of **914 kWh** were recorded.

Electricity from the Grid was used at both studios to power the sets with support from generators for the basecamps.

UNIT & TRANSPORT DEPARTMENT



*Fuel data from third-part transport companies was not included as this data was not available.*

**2 859 MtCO2e**

**Environmental Goal 5: To influence the departments to construct sets that will have a positive contribution towards the circular economy**

## SUSTAINABILITY IMPACT

### Art and Props Department

Models for the Art Department were made from plasticine clay. Lorelei Haselton (Art Department Coordinator) worked with the Eco-Stewards to ensure that all clay models were collected and donated to a local government school - Bokmakierie Primary School. All paints used for food props were edible paints and any natural materials that were used were composted. No props were thrown away, all props manufactured were either kept in-house, donated or sold.

### Set Decoration Department

Most of the Set Dressing materials were repurposed items from scrap yards or RBW 1.

The Set Dressing team worked closely with the Eco-Stewards during the Wrap period to ensure that all Set Dressing items that were not stored for Season 3 were donated or responsibly recycled. Set dressing materials such as steel were returned through a buyback system with suppliers.

The Lo Rall metal recycling and buy-back initiatives from the Set Dressing Department resulted in a 21.18 MtCO<sub>2</sub>e savings ultimately being deducted off RBW S2's total Carbon Footprint.

The Set Decoration Department were awarded the Golden Wolf Award for the most sustainable department.



### Construction

#### Minimal Set Construction

The Construction team on RBW S2 has set a standard when it comes to building sets in a manner that uses as few resources as possible while still achieving the goal of making sets look realistic. Not only is this a financially beneficial way of building, but it is also more sustainable.

#### Optimizing Set Builds

The construction team will always look at the potential to reuse and incorporated sets into a new, upcoming set. It not only saves them time, money and resources, it also means we're getting the most out of the materials we've brought onto the production. For example, some of the pieces from the cave set was reused when building the temple set. Modular sets were built where possible. This allowed the set to be easily pieced together and deconstructed, which means the material loss ratio was reduced. For example the habitat interior and exterior sets were assembled together, so that they could be deconstructed during wrap and put in storage for the next season.

#### Circular Economy

Due to the size of the set-build, there was a considerable amount of timber. This meant we had an abundance of small-medium timber offcuts, a total of 102.21 tonnes were prevented from entering landfill. A further 579.075 tonnes were diverted through donations during the wrap of the sets. This saved the Production a total of R302 570.44 (cost of disposal to landfill). and a carbon deduction of 585.66 MtCO<sub>2</sub>e.

#### Polyurethane & Polystyrene

Polyurethane foam in the form of 2 part foam and sheet foam is used extensively in the film industry. RBW S2 is the first production to proactively research how to dispose of this set-build waste. Construction department recycle 90% of the Polyurethane waste from the Temple Set. This resulted in a saving of R15 878.72 (cost of disposal to landfill) and a carbon deduction of 48 MtCO<sub>2</sub>e. All Polystyrene was recycled.

### Greens Department

The Greens Department ensured that indigenous plants were prioritized over alien invasive plants on RBW S2. Carla Jackson (*HOD Greens*) and her dedicated team were committed to using only natural up-keep methods for the plants, avoiding toxic pollutants such as herbicides and pesticides.

A notable aspect that played a role in both the visual realism aesthetic of the show and the sustainability was that 90% of the plants used for the sets were natural plants and not polyurethane replicas.

Seaweed was locally sourced from the nearby ocean shores of Cape Town to create additional unique-looking trees and plants. These were composted at Wrap.

More than ten local community upliftment organizations and schools benefited from the plant's donations, with over 2 500 plants donated. The larger trees used in the backlot set were carefully extracted and taken to safety by Trees SA.



### Costume & Wardrobe

The Costume Department purchased fabric from previous Film Afrika productions as well as making use of the costumes from RBW 1. Most of the fabric had already been “broken-down” and we therefore saved on resources such as electricity, water, and dyes. Where possible natural & organic fabrics, were chosen over synthetics.

Most of the costumes were reused for the different scenes by making small alterations or dyeing them to fit the required description. A large box was placed in the wardrobe department for the collection of fabric scraps. All fabric offcuts were donated. One of the Covid officers collected offcuts for her start-up business, making masks, a local furniture manufacturer collected fabric scraps to use as filling in sofas and donations were made to local organizations and schools. The breakdown and background talent team went to the junkyards to find items to reuse and upcycle instead of buying new products.

The Costume Department installed a JOJO tank that came from Season 1, to collect and store rainwater, as well as recycling the soapy water from their washing machines. They used an eco-friendly laundry ball, an EcoEgg, a sustainable laundry detergent and softener to prevent harsh chemicals from entering the recycled stormwater system in place at the Cape Town Film Studios.

PEAR does not measure the carbon footprint of the Costume Department. PEACH best practices were followed and sustainability initiatives were implemented by the entire department such as eco-bricking – which the crew then took and implemented in their homes.



SUSTAINABILITY IMPACT

**Catering & Craft**

Covid-19 severely impacted the Catering Department's procurement choices as they had to rely on single-use packaging for all food items as per Covid-19 safety protocols.

The Catering Department sourced various alternatives to non-sustainable products and opted for Biodegradable - which accounted for 95% of food packaging types.

Recyclable food packaging - accounted for 5% of packaging types selected.

The CTFS Environmental Management & Sustainability Department ensured that the biodegradable packaging was composted and that the foil containers were recycled. This would not have been possible without their intervention.

Only seasonal fruit and vegetables were served and the Meat-Free Tuesdays further reduced the carbon footprint, however the consumption of 12.85 tonnes of Animal Protein accounted for 64% of the total footprint for Catering.

**Covid Department - Covid-19 – Environmental Impact**

The Covid-19 Department was a new department, adding an additional carbon footprint to the Production that otherwise would have not existed. Each stage and workshop were allocated into zones, each zone had one Covid Monitor that digitally signed-in and screened cast and crew. When entering from another zone outside your zone, crew were required to wear a full PPE kit. This meant additional inputs on a massive scale.

Covid-19 contributed significantly to - and increased - our carbon footprint through the addition of Covid-19 fuel usage, medical and PPE waste, Covid-19 consumables and meals for 43 Covid-19 crew. The total Covid-19 cost to production was over R119 million, with Covid-19 testing for Cast and Crew amounting to R81 million.



**R119 Million Total Spend**

- Covid fuel total was R918k
- Covid Outsourced labour was R22m
- Covid Consumables/PPE was R12m
- Covid Testing was R81m
- Inhouse additional labour was R4m



## SUSTAINABILITY IMPACT

26

### Assistant Directors, Continuity

Sustainability memos and one liners were added to the call sheet everyday. The assistant directors announced the sustainability messages on the radio to encourage crew members to use the three-bin system effectively as well as communicate the various green initiatives.

For example, we had a activation day around Earth Hour where a message was broadcast across the radio to switch-off all non-essential appliances and light a tea-lite candle for one hour.

Wendy Alport (*1st AD*) recommended changing the Organic Waste Poster on the bin, making it easier for the crew to understand where to throw their organic food packaging.

### Camera, Sound, Lighting, Grips

The lighting packages that were purchased on RBW S2 were 100% LED. **95%** of the total lighting used on RBW S2 was LED. Leftover consumables were donated to the local film schools.

All of the poly boards used on RBW S2 were reused from previous productions.

### SFX & Stunts

Environmentally friendly products were used such as propane for fire effects, biodegradable snow, and glycerine and water mix to create smoke fluids.

### Hair and Makeup

The hair and makeup department used cruelty-free beauty brands. They ensured that all their plastic packaging and bottles were collected and recycled correctly through the waste management system.

In addition to their sustainability efforts, they committed to reducing their consumption of aerosols to only three products - *during the entire production!*

### Creative Effects

Through advances in technology the Creative Effects department have been able to transition from manufacturing moulds out of fibreglass and resin, to 3D printing moulds out of a biodegradable PLA starch.



**Environmental Goal 2: To accurately measure the carbon output of RBWII**

## SUSTAINABILITY IMPACT THE CARBON FOOTPRINT

### Carbon Footprint Calculation

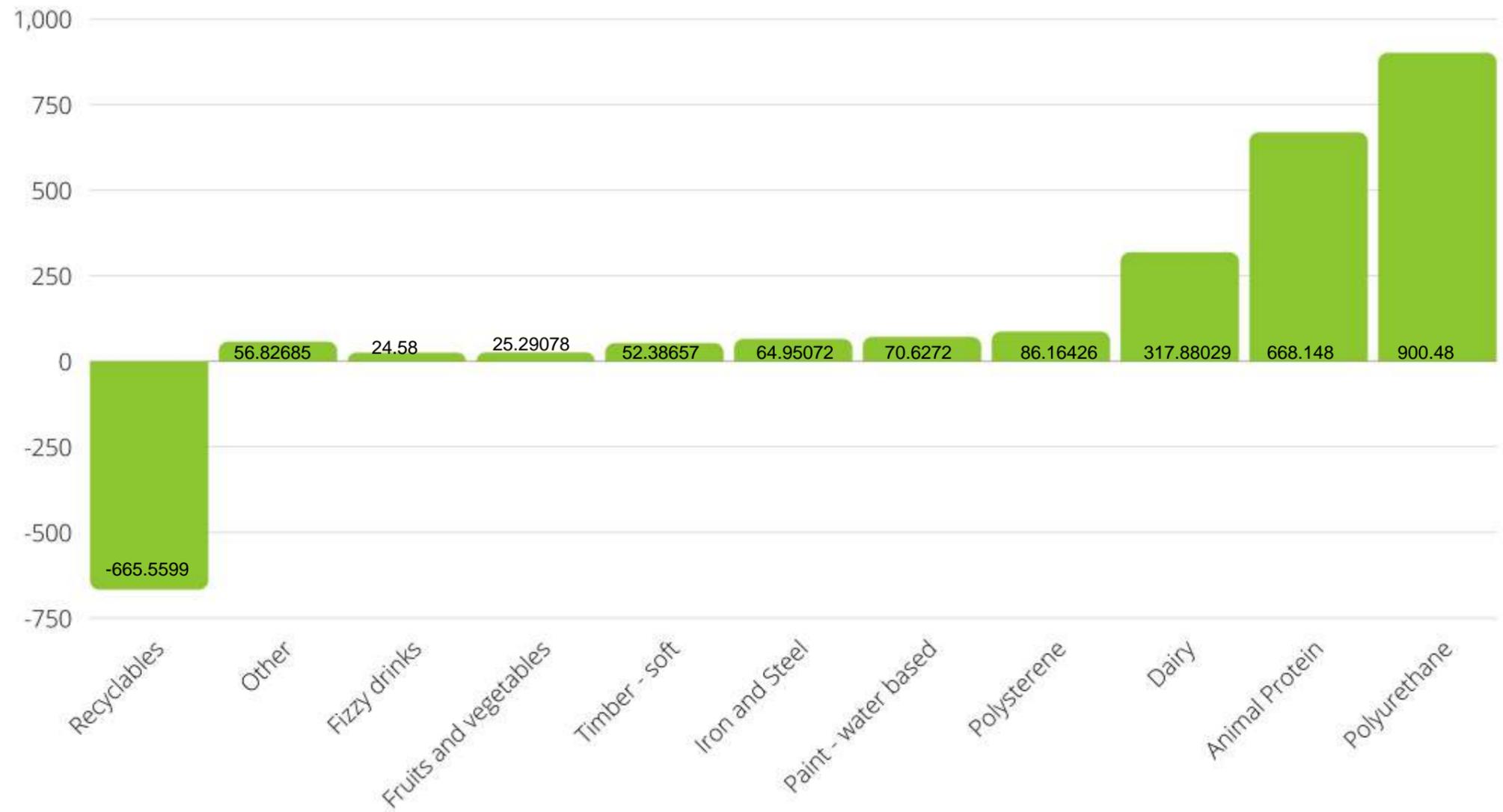
The boundaries for calculating the Carbon Footprint on RBW S2 was the Production Spend, Operational Dates, and data/proofs provided to the sustainability team by the various departments.

The GS calculator includes a ‘recycling department’ that tracks material that is reused or passed on to another production.

By tracking emissions, and emissions savings to specific departments, the calculator is intended to assist in identifying and reducing emissions. This is a process that will increasingly underpin the competitiveness of the local film industry.

This footprint calculation has not been audited by a third party, but every effort has been made to ensure that all data has been correctly input into both the GS Carbon Calculator and PEAR. The Greenset Eco Stewards received additional support from Credible Carbon [www.crediblecarbon.com](http://www.crediblecarbon.com).

**About the Greenset Carbon Calculator**  
The Greenset Carbon Calculator, with 46 Key Environmental Indicators (KEIs), uses coefficients based on South African studies and South African data, wherever possible. Where coefficients were unavailable through open-source South African studies, the most appropriate alternatives were sought. The GREENSET Carbon Calculator measured the following Key Environmental Indicators: Municipal Water, Polyurethane, Timber, Iron & Steel, Textiles, Covid-19 PPE Medical Waste, Paper, Freight (land), and a number of other KEIs.



**Environmental Goal 3: to divert 70 percent of the waste from landfill & proactively research and implement solutions for the recycling of PU Waste.**

At the end of Pre-production, the waste figures were stacked against us, only 29% of our waste was being diverted from landfill. Cheryl and James agreed that Green PA trainees should work full-time at the Good Hope Centre Studios, the CTFS, and with the filming crew for RBW S2 to achieve the goal of diverting 70% of the waste. Notably, the diversion rates went from 29% to 64% as a result of the efforts of the Green PA's, the CTFS, the Unit & Locations department and the strategic weekly messaging that educated the crew about the 3 bin system on set.

The Cape Town Film Studios Environmental Management & Sustainability Department, manages waste generated at the Cape Town Film Studios. They worked with the production team from early pre-production until the end of wrap. All waste from external filming locations was returned to the state-of-the-art Waste Management facility at the CTFS.

The CTFS Waste management team generated comprehensive monthly reports for the waste collected at the CTFS, The Good Hope Centre Studio and other locations. The Eco-Stewards analysed data from the monthly reports to determine the total waste generated by RBW S2's production activities as well as the related Carbon Footprint.

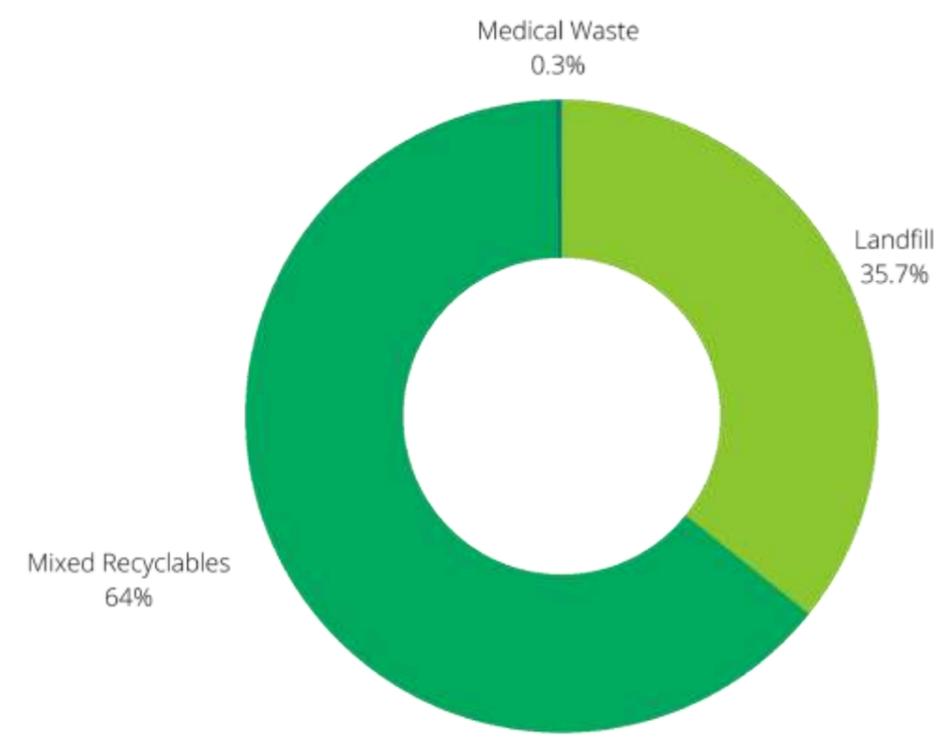
Polyurethane is classified as hazardous waste and was removed from the site in waste skips supplied by Enviroserve.

*For information on the Recycling of Polyurethane, see page 33 under the topic "Research and Innovation."*

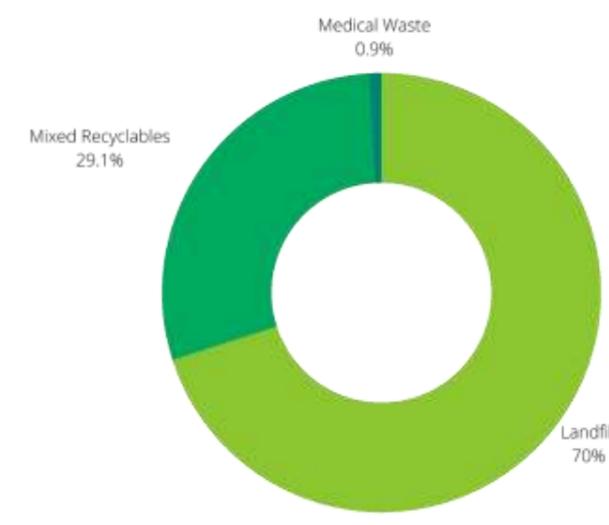


## SUSTAINABILITY REPORT

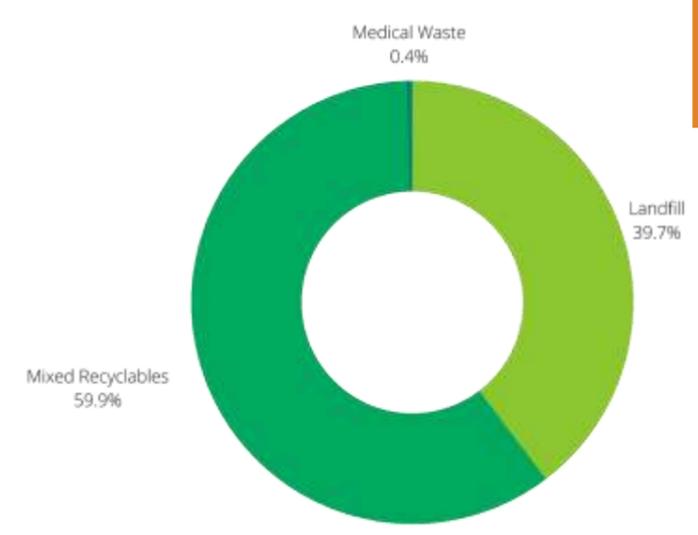
### WASTE TOTAL



### PRE-PRODUCTION WASTE



### PRINCIPAL PHOTOGRAPHY WASTE



*The waste graphs in this report were generated using the data supplied by the CTFS.*

**Environmental Goal 3: to divert 70 percent of waste from landfill**

**Good Hope Centre Studios**

All SET generated waste from GHC as well as saw dust and some e-waste was transported to the CTFs. Sibu was the onsite Green PA who sorted all waste at the Good Hope Studios.

Recycling:

The waste service recycling partner was *L&B Recycling*, a level 2 BEE waste company located in Woodstock, 2.6km from the Good Hope Studio.

Wood repurposing:

Most of the wood offcuts were collected and donated to **The Atlantis School of Skills**. The donated timber was used to make furniture and other crafts that were sold to raise funds for the school and supplied learners with materials to practice their artisan skills.

As a result there was a significant reduction in the general waste skips that left site during the 6 months of pre-production and shoot at the GHC studio.

Organic Waste:

The Bokashi system was used for composting all the food waste generated from the construction crew working at the Studio.



The *Circular Economy Hub* was created to ensure that, smaller organizations, and community members with limited resources also benefit from donations. "The Ark" -a non-profit organization (NPO) served as a central drop-off point for donations. The men of THE ARK collected timber during wrap when wrapping of sets was time sensitive. They received resources such as wood offcuts, plants, and fabric offcuts and temporarily stored them until they were donated to an organization or someone in need.

## SUSTAINABILITY IMPACT

### Donations

1A	The Ark	Timber	111 x 7 ton Flatbed truck
1B	The Ark	Set Dressing items	8 x 7 ton flabed
2	Atlantis School of Skills	Timber 16 x 1 ton bakkie + Aluminium sheets 1 x 1 ton bakkie + Fabric offcuts 180kgs	
3	Khayalitsha CAN	Timber	1 x 2 ton trailer
4	Suburban Second Hand Materials	Timber	8 x 4 ton truck
5	Ujamaa	Timber 2 x 1 ton bakkie + 380 Plants	
6	Injongo Educare	Fabric offcuts 244kgs	
7	Willow Arts Collective	250kgs compost + Timber	1 x 1 ton bakkie
8	CAFDA	Timber	2 x 7 ton flatbed trucks
9	AFDA	Prosthetics	1 x 1 ton bakkie
10	Animal Welfare Society Stellenbosch	Carpets	1 x 1 ton bakkie
11	Intsika Yethu Foundation	250 Plants	
12	Jan Marais Nature Reserve	320 Plants	

### Donations

13	OV Organics	Timber	1 x 7 ton truck + 1 x 1 ton bakkie
14	Bokmakierie Primary School	Clay	120kgs
15	Little Brinks	Timber	1 x 1 ton truck
16	Amazandla Study Group	Timber	1 x 1 ton bakkie load
17	Calling Academy	200 Plants	
18	GreenPop	200 Plants	
19	Inkwenkwezi Secondary School	180 Plants	
21	Laerskool Stellenbosch	148 Plants	
22	Cape Winelands Biosphere Reserve	380 Plants	
23	Wynberg Girls High School	176 Plants	
24	Guardians of the National Treasure	43 Gum Poles & 263 Plants	
24	Intlanganiso Secondary School	178 Plants	
26	The Sustainability Institute	178 Plants	



## RESEARCH & INNOVATION

Environmental Goal 4: To proactively reduce the Fuel and Energy consumption by implementing alternative energy sources.

## RESEARCH & INNOVATION

Fuel was the largest contributor to the carbon footprint on RBW S1.

After researching alternative fuels for diesel generators, biodiesel was proposed as a fuel option. Biodiesel offers a low-carbon alternative to regular fuel, but it has not been tested for use on film industry-standard generators.

The use of Biodiesel was not explored on RBW S2 due to budgetary and time constraints, however there is a firm commitment from the Unit & Transport Department to trial-run a biodiesel generator on future productions. This experiment will act as a baseline study for the film industry to see if biodiesel is viable for use in existing generators on set. In order to raise funds for this project, GREENSET has partnered with Ithuba Petroleum who in the future will charge a 10c green levy on all wholesale diesel sold to the film industry to fund research into renewal energy options for the film Industry.

### Benefits of Biodiesel

- Produces up 80% less Carbon Emissions than normal diesel
- Saving R2.00 per litre
- Carbon Footprint will be reduced by 80% in fuel – diesel

### Portable Solar Trailers

Film trailers rely on diesel generators for power at filming locations. Renewable energy generators such as the design below - a collaboration between GREENSET and MiSolar - were presented to production.



South Africa is still dependant on fossil fuels, predominantly coal, for municipal electricity. This is changing.

Municipal electricity was the primary energy source at the studios. This resulted in electricity being the 2<sup>nd</sup> most significant contributor to the carbon footprint on RBW S2.

Research was conducted into renewable energy models through collaborations with companies like MiSolar, GreenSun and Atlas Copco, culminating in project proposals for future seasons of Raised by Wolves and the South African Film Industry at large.



## Polyurethane

Due to its versatility and affordability, Polyurethane is used extensively in the manufacture of props and sets in the film industry.

Polyurethane was the third largest contributor to the carbon footprint on RBW S1.

In order to find a solution to this contributor - we needed to understand the problem - and all potential solutions available for the recycling of Polyurethane. To this end RBW S2 commissioned a report.

See report – *The Polyurethane Challenge* <https://tinyurl.com/y2ksef9m>

The findings of the research report released shortly after the start of Principal Photography was that there is no option available in Cape Town for the recycling or upcycling of Polyurethane.

The problem was presented to Hilton Cowie of Envirolite (<https://www.enviroliteconcrete.co.za/>). Envirolite is a company that manufactures building blocks using recycled Polystyrene.

Hilton explained that his current machine designed to chop Polystyrene would not chop Polyurethane. The challenge was on and the clock was ticking. Design a machine to recycle Polyurethane and do so before we start wrapping the sets on RBW S2. The machine prototype was rebuilt three time before it was finally a success.

A total of 20 tons of Polyurethane from the Temple Set has been diverted from landfill through the Polyurethane recycling machine innovation. This is a first for the South Africa film industry.

The ultimate goal is to recycle all Polyurethane set waste created in South Africa. This project has the future potential to allow Polyurethane building blocks made from set waste to be purchased for social upliftment projects by productions who want to recycle their waste and offset the productions carbon footprint.



## ACKNOWLEDGEMENTS AND REFERENCES

34

HBO GREEN – Sustainable Production Manual v2 July 2020

GREEN PRODUCTION GUIDE

<http://www.greenproductionguide.com/tools/>

Cape Town Film Studios. 2021. WASTE MANAGEMENT PERFORMANCE REPORT. (2020-2021)

Raised by Wolves S1 report by Wrap Zero, December 2019

Greenset Carbon Calculator <https://greenset.overactive.co.za/calculator/projects.php>

Thank you to the following Organizations and Contributors:

Credible Carbon

<https://www.crediblecarbon.com/>

Cape Town Film Studios Environmental Management & Sustainability Department

<https://capetownfilmstudios.co.za/environmental-centre/>

The Green Production Guide

<https://www.greenproductionguide.com/>

Envirolite

<https://www.enviroliteconcrete.co.za/>

The Ark

<https://www.theark.org.za>

When the why is clear,  
The how is easy.

MiSolar

<http://www.misolar.co.za/>

SA FILM Academy

<https://www.safilmacademy.org>

GreenSun

<https://greensun.co.za>

GreenCape

<https://www.greencape.co.za>

Elizabeth Myburgh

<https://www.linkedin.com/in/elizabeth-myburgh-318b1463/>

Mark Blignaut

[mark@overactive.co.za](mailto:mark@overactive.co.za)



Caitlin Thomson – Eco-Steward

Caitlin is a graduate of the Stellenbosch University, Sustainability Institute which focuses on Sustainable Development and Entrepreneurship. She is known for being an ambitious change agent. Working towards creating regenerative solutions to global issues for a green circular economy, through mobilizing resources and funds.

Email: [caitlin@greenset.org](mailto:caitlin@greenset.org) LinkedIn: [caitlin-thomson01](https://www.linkedin.com/in/caitlin-thomson01)



Zusiphe Kapa – Eco-Steward

Zusiphe has a Bachelor of Arts degree in Geography and an Honours degree in Geography and Environmental Management from the University of the Western Cape. He is an advocate for environmental and social change and has worked with various organizations around Cape Town in educating communities about their impact on environmental protection and sustainable development.

[zusiphe@greenset.com](mailto:zusiphe@greenset.com) LinkedIn: [zusiphe-kapa21](https://www.linkedin.com/in/zusiphe-kapa21)

Tracking sheets and the carbon calculation are available on request. Email: [info@greenset.org](mailto:info@greenset.org)



*“All it takes is a greener choice every day, the future of the planet is in your hands, so what are you going to do about it”?*

**Amanda Collin**

**Mother**

**Raised by Wolves Season 2**



**HBOMAX**  
**GREEN**

**R A I S E D B Y W O L V E S S 2**