

Impact Report

bitprop

2022/23



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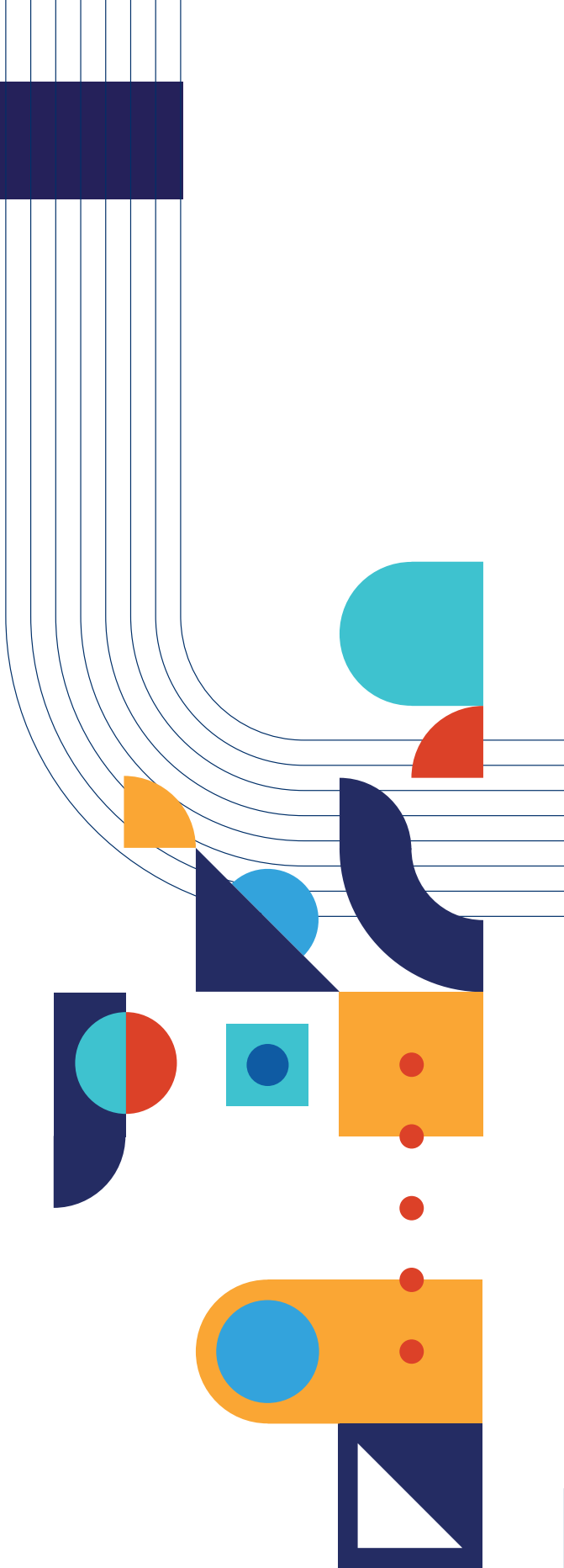
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Patiswa and Zama Mbebe at the handover of their completed units in Eersterivier, Cape Town.
Photo: Vunene Somo

Introduction

Four years ago, Bitprop set out to prove that wealth and income security could be created for those in need through genuine, commercial partnerships with well-intentioned stakeholders. Now, as the company enters its fifth year of existence, 184 successfully operating rental flats across 32 properties validate this concept indeed. But as Bitprop expands its impact, many issues the model addresses have only been exacerbated around the world by global events.

The conflict between Ukraine and Russia which began in early 2022 had a drastic effect on an already unstable global economy, destroying jobs, displacing millions and exacerbating a housing crisis faced around the [world](#)¹. As we continue in this increasingly volatile financial and geopolitical climate, the worst affected are those most exposed to the increasing inequality, lack of job opportunities and rapidly rising costs of living. And, despite widespread dismay, effective action has been limited and society has become increasingly reliant on overburdened states.



Gunilla Carlsson with the Bitprop Team at Innovation City, Cape Town.

Photo: Britney Samuels

This is particularly true in countries such as South Africa, where the government, already supporting most of the population through state grants, is struggling to maintain a consistent electricity supply. This is a massive damper on economic activity and private investment into sustainable development models is sorely needed to ease this burden.

'Backyarding', or the construction of rental property on one's backyard as a means of generating income, has long been popular in developing countries, and has been increasingly recognised as a powerful means for addressing some of the issues mentioned above. The City of Cape Town, where Bitprop has piloted its model, has accepted this and engaged in widespread consultation to develop policy that encourages residents to build rental units safely and legally on their [properties](#)². This solution, although only addressing a small fraction of the global issues, is already having a huge impact in the lives of so many people for whom 'backyarding' presents the only feasible means of survival.

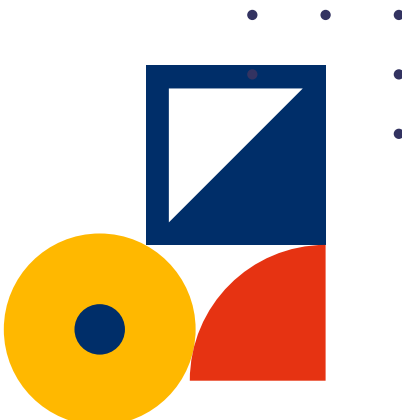


Private sector approaches such as this that solve real world issues are critical, and it is heartening to see Bitprop continue to evolve. The pages below paint a clear picture of this, and the design evolution in particular demonstrates the growth based on real-world feedback. I had the privilege of visiting the team in Cape Town at the end of 2022 and I am excited to see the progress over the next 12 months and to continue being a part of making this fantastic concept a reality.



Agustina Carlson

Senior advisor to Bitprop, vice-chair of the Global Fund Strategy committee
Former minister of international development cooperation, Sweden
Board member of Gavi, UN ASG for UNAIDS



2022/23

in summary

184

rental units

32

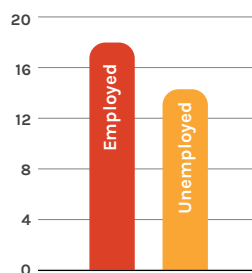
homeowners

Demographics of homeowners

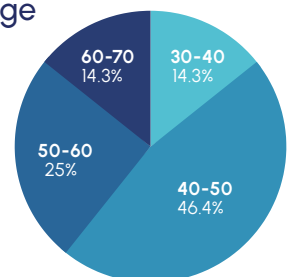
56% Female



38% Green Builds



Age






Average rent level

R3208



Average monthly
rental increased

12.8%



Average
increase
in income for
homeowner
during partnership

37%

Average
increase
in income for
homeowner
after partnership

254%



Average increase
in property value

176%

Bitprop's Model

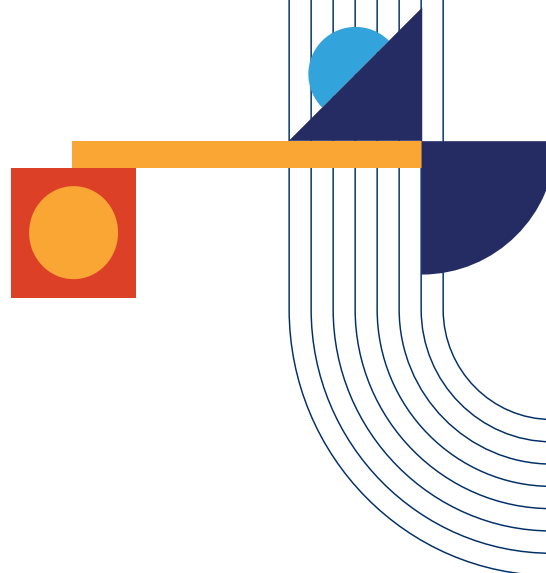


United Nations Sustainable Development Goals addressed by Bitprop's model.

Bitprop partners with township property owners to develop studio rental units behind their house. The homeowner provides their land, and we provide our expertise and support to complete construction in 3 short months. The rent generated by these units is split from the beginning, with the homeowner receiving 15%, a significant new income stream. At the same time, Bitprop is able to recoup capital costs and provide a market-related return to the investor, creating a sustainable investment model.

During our 10-year partnership, we provide insurance, maintenance and technology-based rental management services to the homeowner, working closely with them to develop the necessary management skills they need to run a successful property business. Bitprop is, in a sense, a 'one-stop shop' for the homeowner, who only has to deal with us, allowing us to manage the experience for all and ensure a good return is generated on the investment.

At its core, Bitprop is an ecosystem that uses entrepreneurship and innovation to empower people to develop sustainable income and asset security for themselves and their families. Focusing on existing but unutilised property where the value is the greatest, Bitprop's commercial model provides a way for capital to be used to develop individuals into sustainable entrepreneurs on a large scale.



Tawanda Machava, Portia Msamo, Eric Malotana, Nolufefe Nocanda (homeowner), Justice Nocanda (homeowner), Norman Lonake (homeowner), Zandile Nkompela, Nolitha Vanda and Mohammad Abdul Haque on site in iKwezi Park, Cape Town.

Photo: Tashriq Abrahams

After three years of testing the model, learning from our stakeholders and building our workflow, 2022 was a year in which we scaled to many new families. Our footprint expanded by 268% as we reached a total of 184 units across 32 properties, 2 units more than the target we set ourselves a year ago. In 2022 we also secured significant investment, ran an innovative recruitment process that expanded our team significantly, integrated our workflow into one online system, and standardised our green build design, which is now the default for every property we build. The sections below outline each of these innovations in more detail and emphasise the overall impact of the Bitprop model.

The model works because it benefits everyone involved. For the homeowner, this life-changing investment immediately triples their property value, and creates an income stream 10 times greater than the monthly state pension and many times larger than the average monthly income. For so many without a real pension to speak of, this is a key source of security for the future, as well as an inheritance of significant value to leave for their children. The contractors Bitprop uses to build are from the same communities and working with Bitprop gives them a constant stream of work. Each property we build rental units on creates roughly 30 jobs for the contractor and their team, providing support for many families in the community.

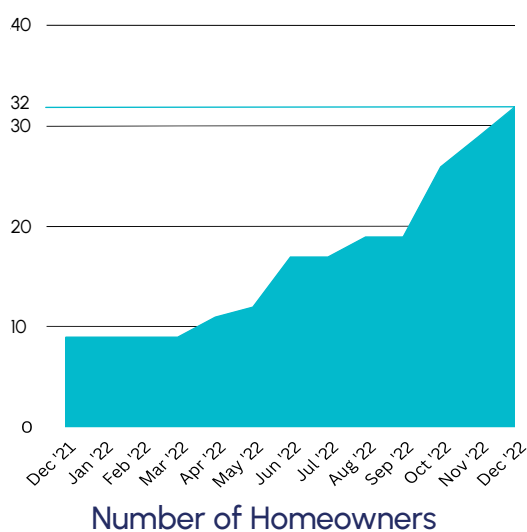
Tenants that live in these units appreciate the quality, safety and affordability they experience in each homeowner's backyard. Investors are able to put their capital to work in an impactful way, conserving its value at the same time so they may use it again in the future for further benefit.





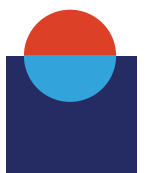
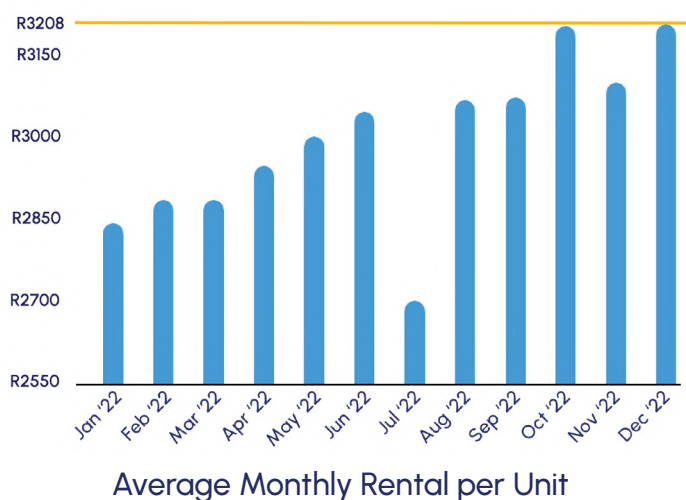
Justice Makuleke, Eric Malotana, Portia Msamo, Ziyanda Mjobo, Zama Mbebe (homeowner), Patiswa Mbebe (homeowner), Anika Hanekom, Tashriq Abrahams and Nolitha Vanda at a property handover in Eersterivier, Cape Town.

Photo: Vunene Somo



One conversation with a homeowner is enough to see that the impact is huge. However, achieving that impact requires many operational elements coming together. For each homeowner running a successful property, many months of hard work went into getting there. Starting right at the beginning, our team works hard to build trust with hopeful applicants. For a market segment so accustomed to scams, good communication at this stage is critical and our Homeowner Relationship Managers do a fantastic job of building an initial relationship with each applicant and helping them every step of the way to submit their information. Our applications team then assesses the viability of the property and the applicant, before taking them through what the partnership would look like in detail.

For those that are happy to partner with Bitprop, our architectural team produces building plans for their property and submits a council application on their behalf, a service that makes Bitprop unique. Our building management team begins preparations with one of our contractor teams and a build date is scheduled. The construction itself takes 10-12 weeks on average and involves rigorous quality assurance at every stage. While this takes place, our homeowners receive training on the property management skills necessary to run a successful rental business. Together, the homeowner and Bitprop advertise for tenants, conduct viewings and sign-up individuals eager to be the first occupants of these new rental units. Once ready, the property is handed over and Bitprop's rental management team works hand-in-hand with the homeowner on rent collection, maintenance and general property management for the duration of the 10-year partnership.



We remain committed to enabling the development of our stakeholders, and to expanding the reach our model has, an intention we set out last year in our impact report. We continue to address many of the United Nations' Sustainable Development Goals (SDGs) in various ways, which serve as a good yardstick against which to mark our progress.



Tashriq Abrahams and Carl Fredrik Sammeli leading a site visit in iLitha Park, Cape Town.



Photo: Rebecca Wakefield

Abraham Avenant from CRDC demonstrating the Resin8 product to Tashriq Abrahams at their facility in Cape Town.



Bitprop is an impact investment opportunity that focuses on social impact. The following page breaks down the SDGs that Bitprop addresses into the three respective Environmental Social Governance (ESG) categories. Of the 17 SDGs, Bitprop addresses 14.



ENVIRONMENTAL [6 SDGs]



Clean Water and Sanitation: The flats in which our tenants live have reliable supplies of clean water and appropriate drainage systems are put in place to avoid blockages and health concerns.



Affordable & Clean Energy: Instant hot water cylinders reduce electricity consumption, and metered electricity and water supplies keep consumption measurable and low. All communal lighting is 100% powered by solar energy.



Industry, Innovation and Infrastructure: Bitprop's unique model improves the overall infrastructure of the communities in which it works. 'Healthy' urban densification occurs and Bitprop's properties can serve as a catalyst for urban renewal.



Sustainable Cities and Communities: Our units align with the City of Cape Town's desires to see healthy, urban densification occur and the continued work we are doing with the City and other experts will advance this further over time.



Responsible Consumption: Our properties encourage responsible consumption of resources by using low flow taps and instant speed water heaters that consume electricity only when water is needed.



Climate Action: Our building process introduces materials that require fewer natural resources to build with and have a lower carbon footprint, reducing our impact as we grow and spreading awareness of environmentally friendly building practices around the communities we build in.

SOCIAL [10 SDGs]



No poverty: By assisting homeowners and builders to start or grow businesses and earn income, we help them reduce their reliance on employment or state support.



Zero hunger: With a stable monthly income, homeowners and builders can provide food for their families.



Good Health & Well-being: Bitprop provides homeowners with a life-changing opportunity to plan for their and their children's futures and tenants with flats that are comfortable, safe and high quality.



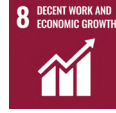
Quality Education: Homeowners are trained to become landlords and to manage rental income. Workers and contractors are upskilled on site, gaining experience needed to find further work and enhance their capabilities over time.



Gender Equality: Bitprop's selection process favours female applicants as the primary candidates per property and our partnership helps them achieve their own financial independence.



Clean Water and Sanitation: The flats in which our tenants live have reliable supplies of clean water and appropriate drainage systems are put in place to avoid blockages and health concerns.



Decent Work and Economic Growth: We enable homeowners to become entrepreneurs and all contractors and workers on site are upskilled and professionalised over the duration of our projects.



Industry, Innovation and Infrastructure: Bitprop's unique model improves the overall infrastructure of the communities in which it works. 'Healthy' urban densification occurs and Bitprop's properties can serve as a catalyst for urban renewal.



Reduced Inequalities: By enabling our homeowners to become entrepreneurs with a means of achieving financial independence, we are working to reduce some of the income inequality in the world.

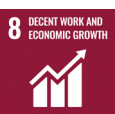


Responsible Consumption: Our properties encourage responsible consumption of resources by using low flow taps and instant speed water heaters that consume electricity only when water is needed.

GOVERNANCE [7 SDGs]



Gender Equality: Bitprop's selection process favours female applicants as the primary candidates per property and our partnership helps them achieve their own financial independence.



Decent Work and Economic Growth: We enable homeowners to become entrepreneurs and all contractors and workers on site are upskilled and professionalised over the duration of our projects.



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Responsible Consumption: Our properties encourage responsible consumption of resources by using low flow taps and instant speed water heaters that consume electricity only when water is needed.



Partnership for the Goals: Bitprop secures investment from individuals and mobilises additional financial resources from developed countries in a sustainable way to the benefit of economic and social growth in developing markets.

Meet the People

Homeowner-Entrepreneurs



Bitprop's impact on homeowner-entrepreneurs addresses these UN SDGs.

Our homeowner-entrepreneurs play the most important role in our connected system. They are our main partners, trusting us with their most valuable asset and working with us to create a system that is sustainable and rewarding. For many, Bitprop provides the opportunity to realise a life-long dream and the partnership acts as a financial and educational springboard, allowing them the freedom and security to pursue entrepreneurship and invest in their future.

Throughout the partnership we provide homeowners, the majority of whom are women, with education to become landlords, equipping them with the skills to start, manage, and grow their own businesses. During our partnership, homeowners fulfil the role of landlord and facilitator between tenants and Bitprop; operating the channels of communication, overseeing satisfaction of tenants, and ensuring that the management of their property maximises the impact for all parties.

Nomawisa Tanga, Bitprop homeowner-entrepreneur in iLitha Park, Cape Town.



Photo: Claire du Treuil

Nicolette Mfobo, Bitprop homeowner-entrepreneur in Blue Downs, Cape Town.



Photo: Yunene Somo

Nolufefe Nocanda, Bitprop homeowner-entrepreneur in iKwezi Park, Cape Town.



Photo: Yunene Somo

Investors

Investing with Bitprop allows access to an attractive market that has previously gone unrecognised by formal capital. By partnering with existing landowners and developing the 'non-investible' land assets that exist within the urban periphery, Bitprop has created a new, investment-worthy asset class that offers sustainable, formal investment opportunities for both individuals and organisations.

To date, our investors are individuals and families that believe in the vision Bitprop strives to achieve, and are willing to put their money to good use in the hopes of seeing a tangible impact being made. The return received from this investment also allows the reuse of capital for further impact at a later stage.

Contractors



Bitprop's impact on contractors addresses these UN SDGs.

We partner directly with local contractors to develop all our units. They are from the communities in which we build and have experience in constructing small-scale developments such as ours. They provide Bitprop with valuable local knowledge and on-the-ground experience that ensures our model is sensitive to the genuine needs of the community. They are also central to establishing and maintaining mutually beneficial and trustworthy relationships within the communities – a central point of Bitprop's model. Bitprop provides their businesses with a consistent work stream throughout the year and allows them to build a professional operation; an attractive incentive compared with the alternative of working on ad hoc, informal projects.

We have developed a very close working relationship with the three contracting teams currently partnered with us. Brian Bango and Justice Makuleke have been with us since 2021, while Mohammad Abdul Haque joined in mid-2022. By consistently working with the same teams, and by deploying a standard design that is adapted to each site, we have been able to achieve a consistent build quality across all properties.

Our contractors are familiar with the way Bitprop operates and they follow a standardised checklist, submitting progress photographs of each project on a designated communications platform which is closely monitored and followed up in person by our Construction Manager. Based on this, project milestone payments are made at regular intervals to ensure a continued supply of materials and labour, aiding the contractor in managing their finances and providing the incentive to produce a high-quality finished product on time.

Brian Bango



Photo: Vunene Somo

Justice Makuleke



Photo: Vunene Somo

Mohammad Abdul Haque



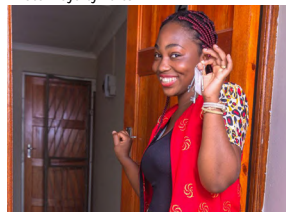
Photo: Vunene Somo

Tenants



Bitprop's impact on tenants addresses these UN SDGs.

Photo: Royalty Edits



New tenant, Sarah Chandiwana, moves into her new flat in iLitha Park, Cape Town.

To maintain a good and harmonious working relationship amongst all parties, our Homeowner Relationship Managers work with our homeowners to choose the tenants that will live on each property. Our tenants benefit from a model that is developed with the UN SDGs in mind.

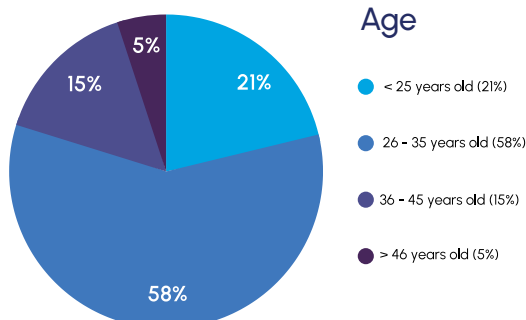
The units are highly sought after, with many new flats renting out within 24

hours of listing online. As testament to the quality of our product and the efficiency of the system we have created, we have two tenants who have been with us since the construction of our first partner development in 2019; a stark contrast to the typical turnover rate of tenants within the township environment.

Demographics of tenants: 61% Female



While our homeowners play the key role in our partnership, our tenants are the end users of our products and services. What we build is informed by the wants and needs of the rental market. Our past and current tenants have provided much insight into the practicality and liveability of our units, and we use this feedback to continuously refine our designs in order to accommodate their needs appropriately.



Age

- < 25 years old (21%)
- 26 - 35 years old (58%)
- 36 - 45 years old (15%)
- > 46 years old (5%)



The Bitprop Team

The Bitprop family has grown significantly over the last two years, and this year alone saw the addition of nine ladies. With the need to expand the team and to find the best suited, most like-minded people, we ran a recruitment process that culminated in our recruitment day in September 2022.



Photo: Tashriq Abrahams

Anika Hanekom; Architect: Processes new applicants' properties, develops new designs, prepares council submission drawings and assists with on-site tasks and handovers.



Photo: Tashriq Abrahams

Brittany Newton; Project Manager: Works closely with all members of the team to drive growth and efficiency in operations and communications to meet all targets.



Photo: Tashriq Abrahams

Buhle Gqola; IT & Systems Manager: Oversees the IT infrastructure of the internal team, manages rent collection and assists with Bitprop's maintenance management process.



Photo: Reece Wakefield

Carl Fredrik Sammeli; Founder: Moved to South Africa in 2012 and founded Bitprop in 2019 as an entrepreneurial and innovative way to create true value and upliftment.



Photo: Reece Wakefield

Dylan Walls; CMO and COO: Oversees the marketing and communications strategy, as well as the management of the internal team. He also runs Bitprop's application processing and homeowner relations, both before and after construction.



Photo: Tashriq Abrahams

Eric Malotana; Homeowner Recruitment Manager: Helps potential homeowners understand whether Bitprop is the right choice for them, and how to apply. During construction, he works with them on landlord training.

The recruitment event at our office in Cape Town was an opportunity for the 66 shortlisted candidates to meet the Bitprop team, experience its culture in-person and engage with many dedicated and passionate people in one setting. Many of the applicants remained at the end of the 4-hour process to express their enjoyment of the event regardless of the success of their applications; a comment received by multiple Bitprop team members as the candidates left.

Now fifteen people strong, our team has produced a 268% increase in portfolio size. February 2022 marked the completion of the ninth property in our portfolio. By December 2022, we had proudly partnered with 32 homeowner-entrepreneurs. We interact with our stakeholders on a daily basis and our team on the ground is exceptional at what they do, navigating any situation with an easy smile and a solution.

The team is made up of highly skilled professionals who are passionate about using their knowledge and skill sets to create impact through collaboration and innovation.



Gunilla Carlsson; Senior Advisor: Plays an integral role in supporting the team and telling the Bitprop story in important global circles, boosting Bitprop in its mission to change lives through property ownership and development.



Photo: Tashriq Abrahams

Jonathan Fisher; CFO and COO: Uses his wealth of experience across all areas of Bitprop's operations, guiding and managing Bitprop's financial operations, raising capital and maintaining strong investor relations.



Photo: Reece Wakefield

Nolitha Vanda; Homeowner Relationship Manager: Trains new homeowners on the property management skills they need to begin their property businesses successfully, and assists with finding tenants and processing lease agreements and rental payments.



Photo: Tashriq Abrahams

Portia Msamo; Bitprop Foundation Project Manager: Manages the first active project in the Bitprop Foundation and is planning multiple additional projects that will support our communities and have a deep impact in the areas we work in.



Photo: Priscilla Mdingi

Priscilla Mdingi; Maintenance Manager: Liaises with landlords, tenants, sub-contractors and builders to solve maintenance issues that arise. She assesses problems and negotiates with service providers successfully and cost effectively.



Photo: Reece Wakefield

Tashriq Abrahams; Architect: Oversees the process of systematising and standardising our architectural framework and council application process. Tashriq conducts initial assessments of applicants' properties and oversees their progress from conceptual design to completed buildings.



Photo: Tashriq Abrahams

Vunene Somo; Content Manager: Makes and manages engaging content and measures its impact with Bitprop's audience as we provide updates on Bitprop's progress. She also works alongside her colleagues on planning and executing content and communications strategies.



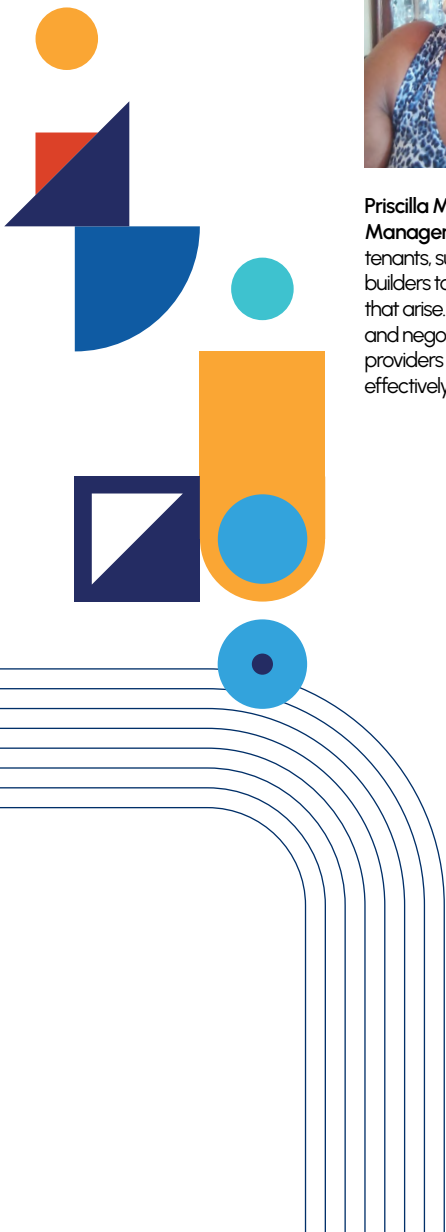
Photo: Tashriq Abrahams

Zandile Nkompela; Homeowner Relationship Manager: Trains new homeowners on the property management skills they need to begin their property businesses successfully, and assists with finding tenants and processing lease agreements and rental payments.



Photo: Tashriq Abrahams

Ziyanda Mjobo; Construction Manager: Oversees planning and supervising of Bitprop construction projects from start to completion, ensuring that builds are completed safely and within the agreed timeframes, quality and budget.



Design Evolution

Developing our 'green' build



UN SDGs addressed by Bitprop's design improvements over time.

Since Bitprop's beginning, securing council approval for backyard rental units has been an uncertainty. Despite overwhelming support from the City of Cape Town and local council offices for the growth of backyarding, which solves many critical social issues, the regulatory framework has struggled to keep up and has continued to be overly rigid and cumbersome.

In the last year, however, we have been fortunate to work closely with the City of Cape Town and Development Action Group (DAG) on a study about the opportunities in regulating and formalising the small-scale informal rental housing sector in South Africa. As a result, the Inclusionary Housing Policy has recently been adopted and will hopefully be implemented in our surrounding communities [soon](#)³. Better design and construction processes will produce not only better housing standards, but improved economic, environmental, educational and emotional impact on the community too.

Bitprop's rental units have evolved greatly since the first ones in 2019. Our initial designs experimented with materials found in the township context and helped us better understand the physical environment and financial considerations faced on site. Other lessons included understanding the key balance among the rental levels in an area, the quality of construction undertaken, the amount of maintenance required and the ideal partnership period with a homeowner.

This led us to reassess our model and update our designs. These design changes were informed by a number of factors: a need for better materials with improved physical properties that would require less maintenance over time and be more cost effective to build, demand from tenants for a higher quality product, and a desire to address some of the UN's Sustainable Development Goals in the long-run.

After various iterations, we established a standard design that could be adapted according to the needs of each individual site, suiting both Bitprop and the contracting team, and resulting in a happier homeowner and tenant. The next step in our design evolution was to improve environmental sustainability while maintaining the stability of the model for all stakeholders. The two major challenges to this were a lack of affordable alternatives to conventional building materials, and a lack of awareness about sustainable design in a township context. By nature, sustainable development has been exclusive to those who are able to afford it, a luxury as opposed to standard, making it completely unaffordable to individuals living from hand to mouth.

A Bitprop green build completed in late 2022 in Eersterivier, Cape Town.



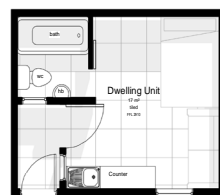
Photo: Vunene Somo



After discussions with numerous manufacturers, it became clear that green materials would come at a premium, and for a long time it wasn't feasible. Recently, we found innovative solutions in [Envirolite](#) and CRDC Global's [Resin8](#), two products that challenge conventional materials by creating affordable, sustainable alternatives that improve on the thermal, acoustic and fire safety properties of standard building materials generally used in the township environment. The use of these materials now forms the basis of our standard design.

Where conventional materials typically use natural additives such as sand and stone mixed with concrete, both the Envirolite and Resin8 products supplement the use of natural additives with recycled plastics and polystyrene. Because of this, an average of 750kg of recycled plastic waste goes into the construction of each flat. The plastic used is collected from landfills and buy-back centres, as well as local residents and businesses, and the Bitprop Foundation runs its own recycling project that collects plastic from our communities and sends it directly to CRDC Global to be made into bricks.

According to an independent [EDGE](#) report produced for us, our design contains 64.3% less embodied energy than EDGE's base case for a low-income rental unit. It even achieves a 59.2% reduction in energy consumption when compared with our previous design with conventional materials.



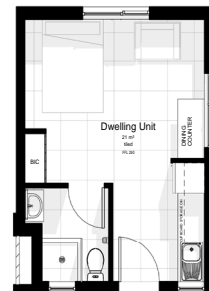
2019



2021



2022



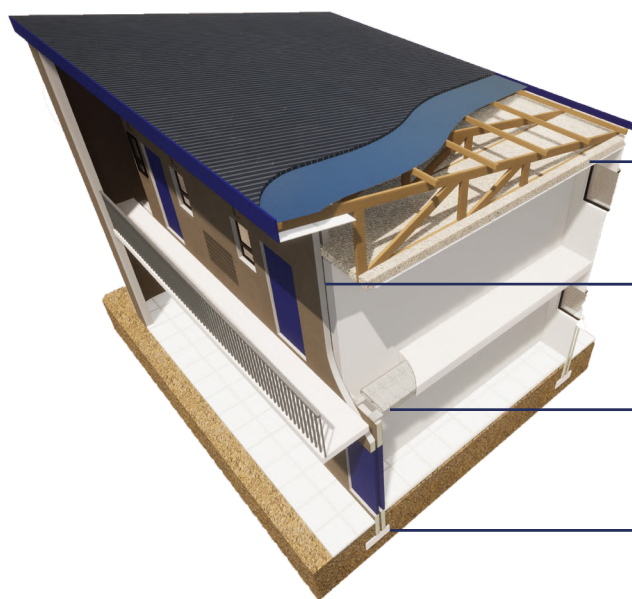
2022

Design changes have taken construction quality, comfort and affordability into account over time to arrive at an ideal version for all stakeholders.



Resin8 is a concrete additive formed by the collection, break-down, treatment and granulation of common plastics, creating a suitable eco-aggregate used either in its raw form and added to the concrete mix on site, or manufactured into usable bricks.

Envirolite is a lightweight concrete alternative that uses polystyrene and Resin8 as its aggregate to improve the thermal, acoustic and fire-resistant qualities of the concrete, at the same time reducing its weight.



Green Building Elements

150mm mineral wool insulation

250mm solid cement Resin8 maxi brick cavity wall

250mm Envirolite precast system with cast-in concrete above

25Mpa 700 x 250 reinforced Resin8 concrete footings

Perhaps the most promising characteristic of these materials is that they look and feel exactly the same as conventional materials, contrary to many innovative, but foreign-looking sustainable materials used in more developed countries. For lower-income communities such as those Bitprop builds in, a brick-and-mortar house with solid foundations is something to aspire to, as a symbol of the success and luxury associated with wealthier suburbs. The sustainable products Bitprop uses in its builds possess the same look and feel as the conventional materials residents desire, yet offer far superior benefits at a minimal increase in build cost for Bitprop and the homeowner-entrepreneur.

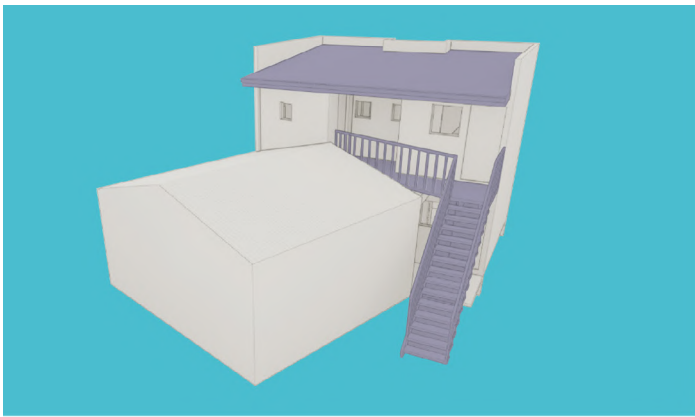
By using these sustainable materials in the affordable rental housing market, Bitprop aims to be a trailblazer that organically introduces such practices to builders and homeowners, and that inspires other developers and up-and-coming entrepreneurs to follow suit.

Justice Makuleke (contractor) and his team with Tashriq Abrahams (architect) after construction is completed on a green build in iLitha Park, Cape Town.



Photo: Reece Wakefield

Evolution of the Design

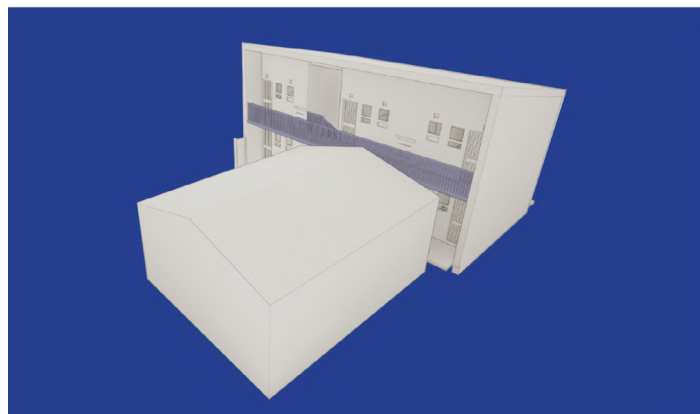


Site B, Khayelitsha: May 2019

- 4 unit build; average monthly rent per unit of R2 000
- Timber first floor and staircase
- Inset roof
- Jagged design to suit site conditions
- Staircase situated in front of flats

iLitha Park, Khayelitsha: July 2020

- 8 unit build; average monthly rent per unit of R2 700
- Introduction of access hatches for easy maintenance of piping and utilities
- Built up against the boundary
- Introduction of central concrete staircase with balcony at the back of flats
- Ground floor and first floor entrances on different sides
- Introduction of utility room for pilot Wi-Fi equipment

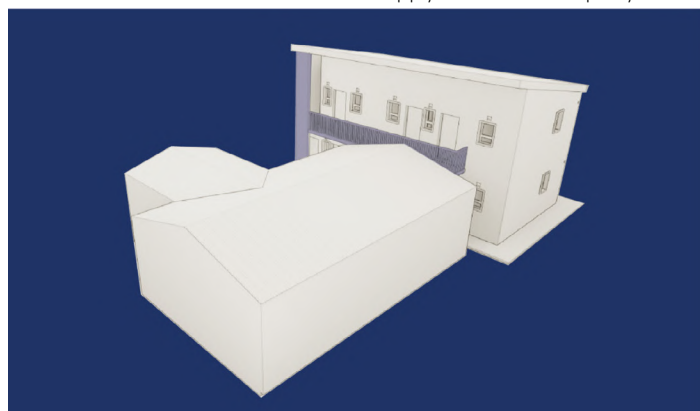
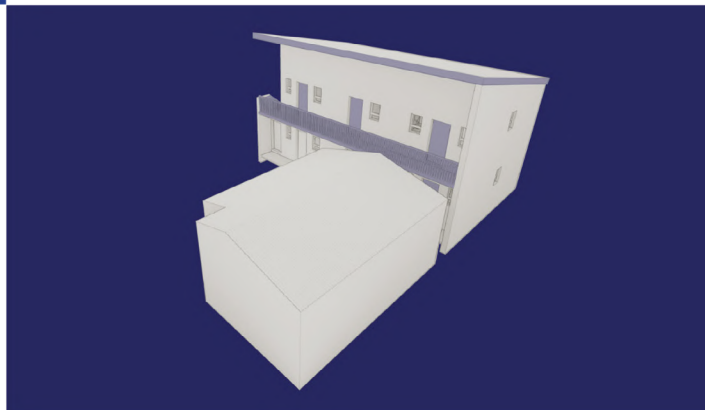


iLitha Park, Khayelitsha: July 2021

- 6 unit build; average monthly rent per unit of R3 000
- Balcony moved to the front and sandwiched between 2 walls to minimise overlooking features
- Stainless steel staircase and concrete flooring introduced
- Size of access hatches optimised and utility room improved to store main electricity distribution board
- Replaced baths with showers to optimise space; introduction of instant water heaters

iLitha Park, Khayelitsha: September 2021

- Only 4 and 6 unit builds; average monthly rent per unit of R3 200
- Design 90% standardised
- Subtle Bitprop design - 'Golden thread': blue doors and roof trim
- Cantilevered roof makes design more appealing, recognisable and functional, stairs moved to the side for a more efficient use of space
- Introduction of dining/work counters
- Utility room further optimised by connecting the main electricity distribution board with its own electrical supply from the municipality



iKwezi Park, Khayelitsha: November 2022

- Only 4 and 6 unit builds, average monthly rent per unit of R3 500
- Introduction of green materials to standard design
- Curved wall, shortened balcony to minimise overlooking features and remove need for a sandwich wall
- Combination of central and side staircases with galvanised railings and balustrades, access hatches reduced in size for improved efficiency
- Multiple standardised design typologies and standard unit size established (16sqm-21sqm)



Homeowner Portfolio

Innovation across all areas of Bitprop has allowed us to create many entrepreneurs across an array of properties, engage multiple contractors and provide quality living space for hundreds of tenants. Our model is now in four areas of Cape Town and we have made huge strides in improving the environmental impact on each property, on top of the massive economic and social benefits already accrued to our stakeholders.

In this section, using a few examples, we have laid out exactly what the results of our projects are, both quantitatively and for the people behind the figures. Our 184 flats owned by 32 homeowners represent a 176% average increase in property value. They have an average tenant occupancy rate of 93.5% and our homeowners receive an average of R2919 in the first month after construction – 40% higher than the state pension of R1890. Once the partnership is complete, this number increases seven-fold.

Zandile Nkompela, Portia Msamo, Ziyanda Mjobo and Skiti Mhlangabezi, a Bitprop homeowner-entrepreneur at the handover celebration of his completed units in iLitha Park, Cape Town.

Photo: Vunene Somo



"I want to thank you, Bitprop, and the whole team as well as the workers for all the hard work. I believe it's going to be challenging but at the same time, it's going to be an exciting new venture. I believe it will be good, so thank you to the whole team." - Skiti Mhlangabezi

Average increase in property value

176%

Average duration of partnership

120
MONTHS



Justice Nocanda receiving a handover gift on behalf of his wife, Nolufefe in iKwezi Park, Cape Town.

Photo: Vunene Somo



"I want to thank Bitprop for giving us this opportunity. I know that you are trying to uplift the standard of the needy, especially women. I hope and believe that this partnership will be a success." - Justice Nocanda

Average size of rental units

17,8m²

Average building footprint

**144
m²**

Average number of
units per block of flats

6

"Bitprop, we really appreciate you guys. You've actually helped us. We had this dream but we didn't really have the power and the finances to build this on our own. It's such a huge investment for us." - Zama Mbebe

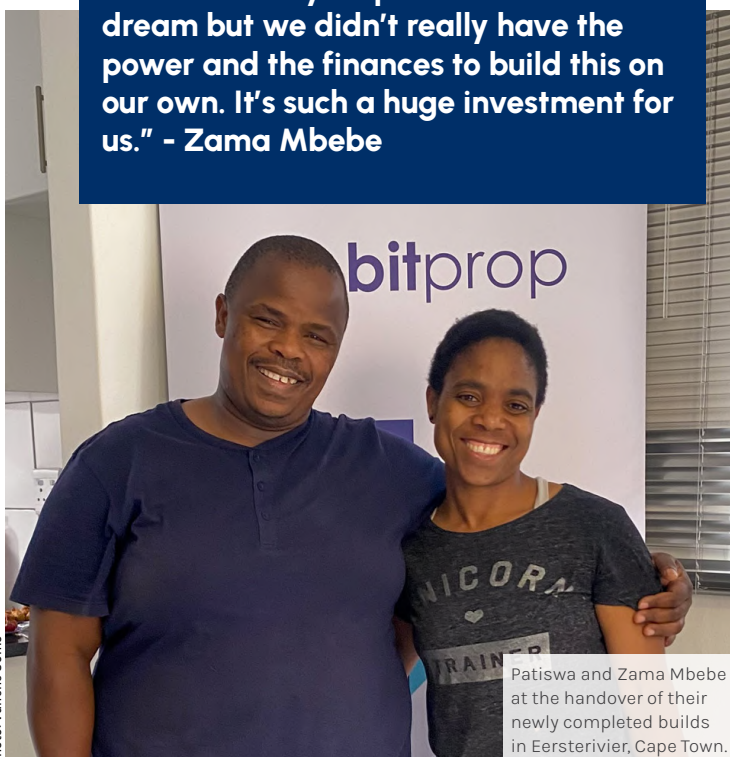


Photo: Vunene Somo

Patiswa and Zama Mbebe at the handover of their newly completed builds in Eersterivier, Cape Town.



Bitprop Foundation



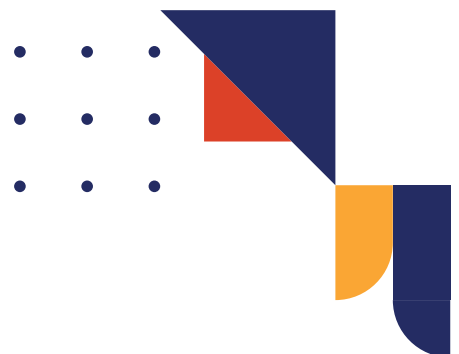
United Nations Sustainable Development Goals addressed by Bitprop's model and reinforced by the Bitprop Foundation.

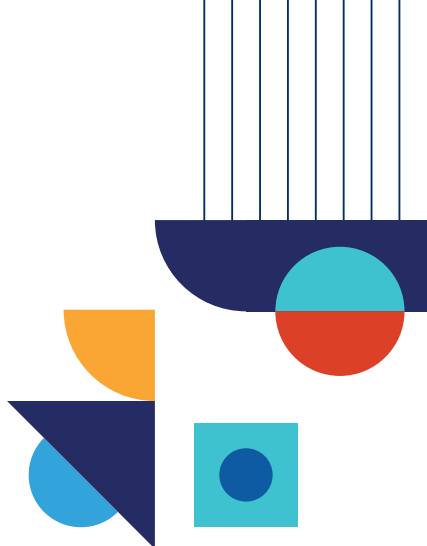
Ncebakazi Gazi, Nothemba Maqhubela, Portia Msamo (Bitprop), Ntombi Mgongo, and Sisanda Tshofela in Khayelitsha, Cape Town.



Photo: Reece Wakefield

Bitprop's purpose is to benefit low-income township communities through entrepreneurship, innovation and good values, helping those that are willing to put in the hard work to secure the tools they need to prosper. Over the years, Bitprop has brought numerous investors, government workers and other well-intentioned visitors to our properties, and so many have wanted to contribute in their own way, beyond Bitprop's properties. And so, to truly be a catalyst for investment and to address issues that the wider Bitprop communities face, the Bitprop Foundation has been created. Using our presence in each area, the relationships we have with the communities and our network with well-meaning funders, the Foundation reaches more people to provide entrepreneurial education and opportunities, business support and community upliftment.





The Bitprop Foundation's main project for 2022 was the Community Recycling Project, an initiative started in November 2022 to create income opportunities, provide education about recycling, and close the loop with Bitprop's use of environmentally friendly construction material. Five unemployed members of iLitha Park, one of Bitprop's communities in Khayelitsha, Cape Town, took part in a recycling training programme before going door-to-door in their communities, dropping off collection bags and teaching residents about recycling.

Once a week, they collect full bags of recycling from their neighbours, which is sold to buy-back centres for a fee. Our recyclers earn an income and are spreading awareness about sustainability in a community not much exposed to it until now. Additionally, all plastic collected is sold back to CRDC, which makes the sustainable bricks and concrete Bitprop now uses in all its builds.

In its first two months, the project visited 25 households and collected 616kg of cardboard, 44kg of cans and 73 bags of plastic, which earned each recycler an average of R291 per month, for 3 hours of work each week. At an hourly rate, this is equivalent to more than double the state unemployment grant. The Community Recycling Project will continue into 2023 with the potential to expand to new communities and provide income opportunities for many additional unemployed community members.

In 2023, additional projects are in the pipeline. These include a 'greenification' project to bring more diverse plant life to the sandy, bare streets of the townships Bitprop works in, as well as initiatives that develop formal education qualifications for rental management and financial literacy to provide stakeholders with tools to take their entrepreneurial journeys further and gain employable skills at the same time. Ultimately, Bitprop should be a catalyst that brings significant formal investment into the township communities it works in, to bridge the gap between the formal and informal economies. The Bitprop Foundation was born from and relies on the financial input and knowledge of well-meaning contributors.

To find out more about these programmes or to get in touch, please visit www.bitpropfoundation.org.

Sisanda Tshofela collecting recyclables in Khayelitsha, Cape Town.



Photo: Reece Wakefield

Portia Msamo (Bitprop), Ntombi Mgongo, Nothemba Maqhubela and Sisanda Tshofela, on a recycling collection in Khayelitsha, Cape Town.



Photo: Reece Wakefield



Going Forward

2022 was the year in which we truly took Bitprop from a start-up to a scalable solution, and a lot changed as we grew. In April we relocated to Innovation City, a new co-working space centred on entrepreneurship and innovation. This was the ideal space to grow our team, and it was here that we hosted our first Recruitment Day, a large-scale hiring event. Out of 400+ applicants, 66 participated in the in-person event and 11 in an online version, engaging with one another, meeting the Bitprop team and completing various assessments and interviews. The five candidates that began at Bitprop in November have already had a hugely positive impact that will help as we continue to expand.

We are excited about the new Western Cape Inclusionary Housing Policy that is being developed based on a research report by the City of Cape Town and Development Action Group (DAG), that Bitprop both contributed data towards and helped [write](#)³. The policy will help formalise township development, relaxing red tape and encouraging residents to seek legal avenues of pursuing backyard developments.

During the year, we added a further 24 partners to our portfolio, increasing our number of flats by 268%, from 50 to 184. We rolled out new services to all properties, moving tenants to an online payment system and significantly improving the efficiency of rental management for all involved. We also tested sustainable concrete materials made using a recycled plastic aggregate that are now standard on our new properties. We hope to have the design EDGE-certified by the end of 2023. In the next stage of the design evolution, we aim to incorporate further alternative passive energy systems, such as solar panels, into our designs.



Eric Malotana and Sithembiso Gambushe (homeowner) in Eersterivier, Cape Town.

Photo: Vunene Somo

All of this is a sign of a well-functioning financial model; one that is now attracting investment from impact funders and providing a way to invest in sustainable development.

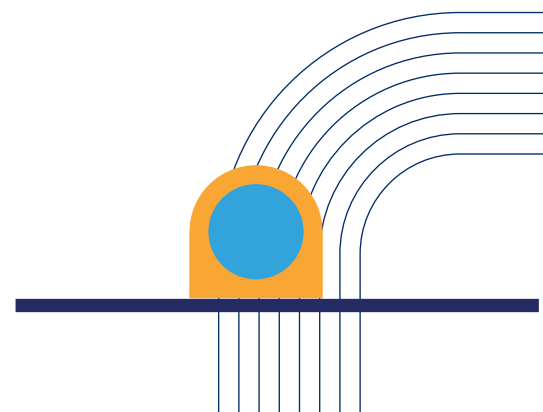
Where are we going? We want to build a world in which people that are willing to put in the hard work to help themselves can secure the tools they need to create income and opportunity with their land assets, for themselves and future generations. While we've established a commercial model that has achieved this for many, we acknowledge that the problems we address are not isolated to a particular region.

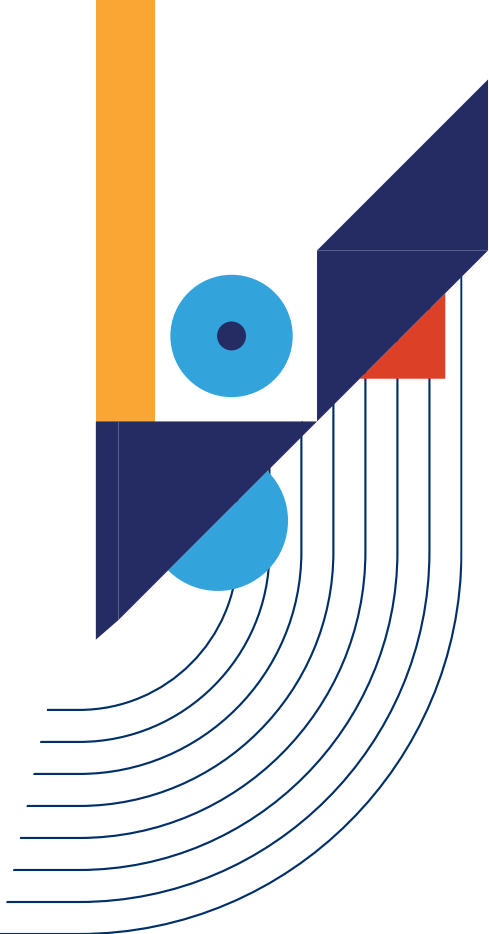
Our hope is that our success will allow for expansion into new provinces in South Africa in the short term, and further into Africa and beyond after that. Along the way, we strive to contribute to meaningful changes within housing development policies that will help others benefit from opportunities such as those our homeowner-entrepreneurs have had. As we set our sights on new areas, provinces and countries, we hope to set an example of a sustainable way to invest in entrepreneurship, job creation and high-quality affordable housing.

Candidates at Bitprop's recruitment day at Innovation City, Cape Town.



Photo: Reece Wakefield





As we grow, we will come across different environments in which new approaches need to be considered. We see that for millions, lack of legal property title is a limiting factor. For those with property but no papers to prove it, using their land to create value is difficult. In the future, we would like to find ways of addressing this in parallel to developing rental income for landowners. For others without any form of electrical or sewage connection, a completely off-grid variation of our design will be critical.

Big challenges such as these need input from multiple angles, and we cannot do it alone. Our partners are good people who are willing to do the work that is necessary to start their property businesses to improve their lives, and play their part in uplifting their communities. We value input from all stakeholders that can help us expand on that, solve problems and achieve great things through good entrepreneurial thinking and collaboration.

I believe in the power of entrepreneurship as a true force for good and I look forward to working with many other fantastic people to find creative ways of growing the transformative effect that well-intentioned, sustainable investment into entrepreneurially-minded individuals and inclusionary housing infrastructure can have on low-income communities around the world.

Please email me if you would like to connect or get involved!

cfs@bitprop.com.

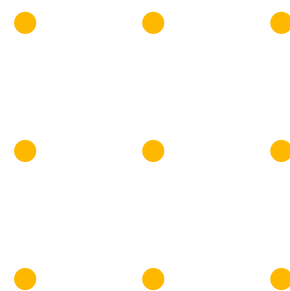
Carl Fredrik Sammeli

Founder, Bitprop

Carl Fredrik Sammeli at Bitprop's recruitment day at Inovation City, Cape Town.



Photo: Reece Wakefield



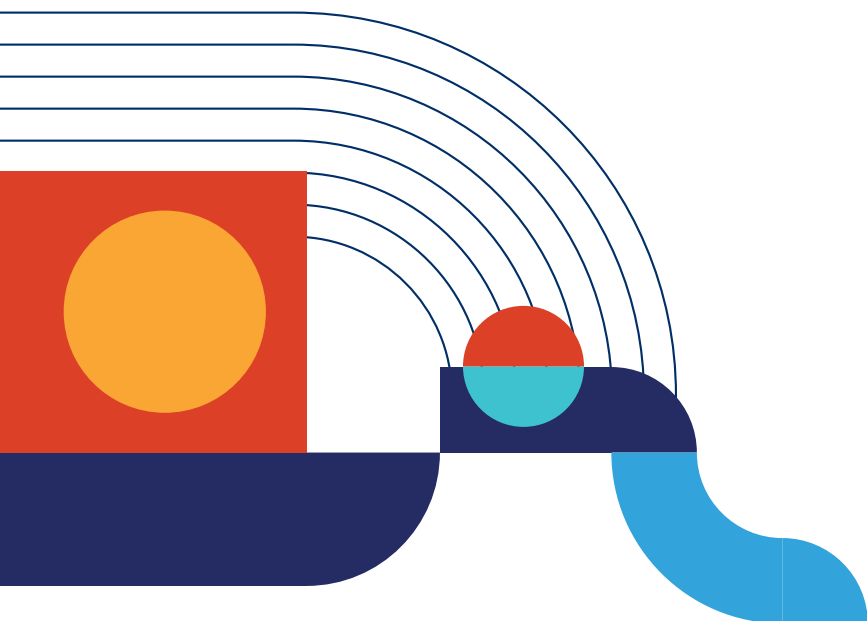




Thanks to the incredible people we work with and the success of our model, Bitprop is fast becoming popular in many neighbourhoods. Often, where one homeowner-entrepreneur has partnered with Bitprop, many of their neighbours wish to partner with us too, as they see the real-world impact first-hand. This image depicts a real street on which one Bitprop property quickly grew into seven. It is an example of how an impact investment into a community can truly help to change circumstances and stimulate beneficial growth of an area that was previously disadvantaged, giving people access to opportunities that can improve their lives.

References

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