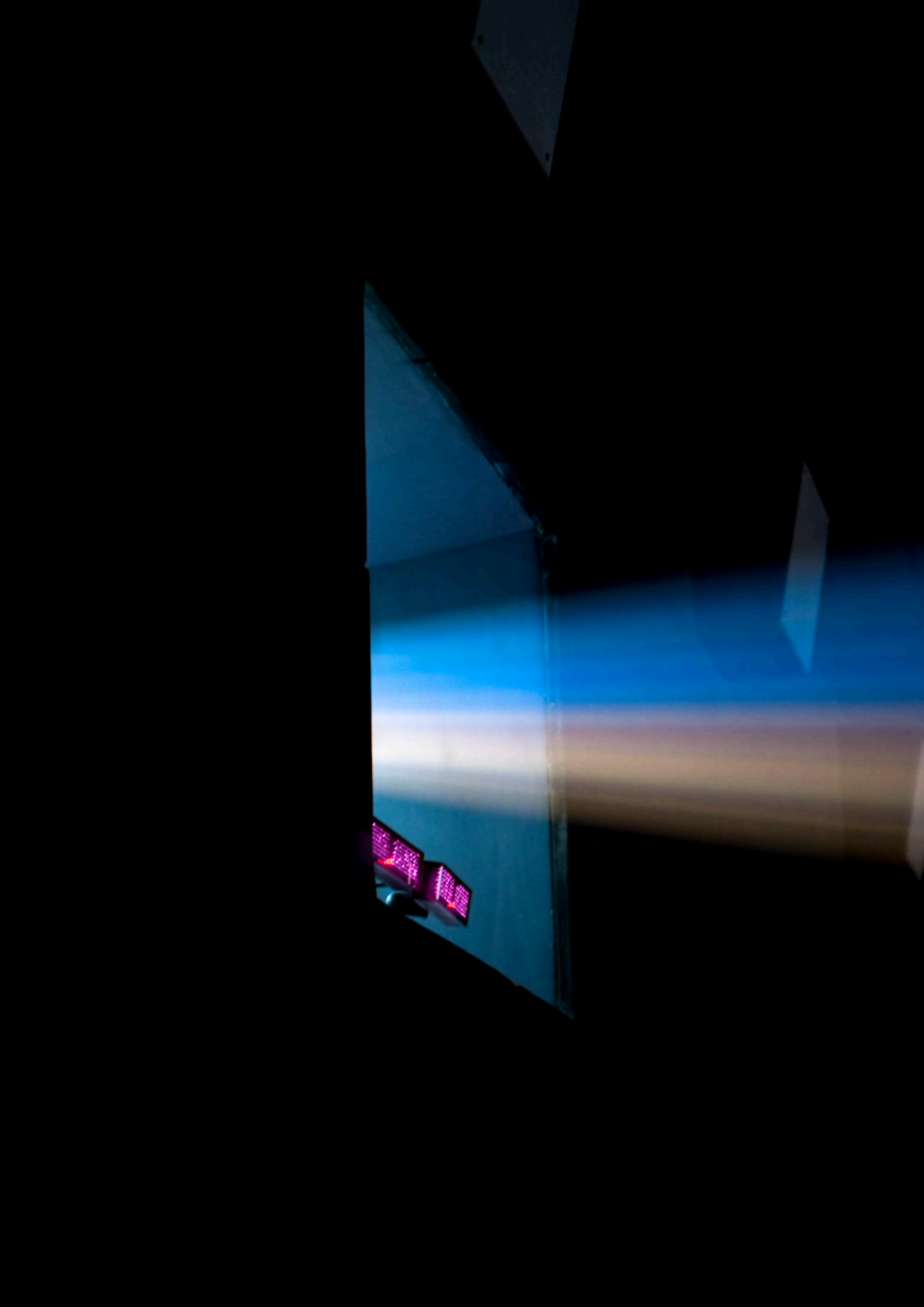


# The Rise of the Green Cinema

*How green cinemas can benefit African societies, environments and economies.*







*These two articles were first published on LinkedIn in May and June 2024, and are meant to be read in conjunction with each other. We hope you enjoy their content.*

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# Lights, Camera, Action!

Africa has long been underserved when it comes to cinemas.

While the West focuses on direct-to-consumer entertainment systems like Netflix, Amazon Prime and Hulu, Africa has an opportunity to harness the power of cinemas to drive economic growth, foster social cohesion, and provide entertainment and education to its communities.

## Why Cinema?

Cinemas serve as catalysts for job creation and economic growth. They generate employment opportunities across various sectors, from construction during the development phase to ticket sales, concession sales, retail sales, advertising, and special events during operations, ensuring a stable and resilient business model.

A study by the National Association of Theatre Owners (NATO) in the United States in 2019—admittedly for a mature market—found that every job in the movie theatre industry supports 14.1 jobs in related industries.<sup>1</sup>

As anchors for commercial development, cinemas attract businesses to their orbit such as bars, cafés and restaurants, shops, public transport operators and other entertainment venues, stimulating local economies and creating a ripple effect of job creation and economic growth. Moreover, cinemas provide a platform for local businesses and brands to showcase their products and services through partnerships and sponsorships.

The development of a cinema sector within African formal economies also offers national and local governments a myriad of benefits.

By operating as registered businesses, cinemas contribute to increased tax revenue through ticket sales, concession sales, employee and corporate taxes. The formal recognition of cinemas also allows for better regulation, ensuring adherence to safety standards, labour laws, and copyright regulations, creating a more stable and trustworthy business environment.



According to PricewaterhouseCoopers (PwC):<sup>2</sup>

- In **South Africa**, the cinema industry has been growing rapidly (and is the 10th fastest growing market in the world), with revenues at USD \$65m in 2022 expected to double to reach \$124 million by 2026.
- In **Nigeria**, the cinema industry has been growing well, with revenues at USD \$6m in 2022 expected to double to reach \$12 million by 2026.
- In **Kenya**, the cinema industry has been growing steadily, with revenues at USD \$5m in 2022 expected to double to reach \$6.5 million by 2026.

## Sharing culture, sharing stories

Beyond the economic and commercial benefits, cinemas offer a much-needed source of entertainment and leisure activities, particularly in areas with limited options. They serve as a gateway to diverse cultures, ideas, and experiences through the power of storytelling and visual media.

They also provide a shared space for people to come together, fostering a sense of community and strengthening social bonds. For example, in Kenya, the establishment of the Nairobi Cinema<sup>3</sup> has not only provided an entertainment venue but has also served as a hub for community events, workshops, and discussions, promoting social cohesion and cultural exchange.

## Unique developments

To successfully develop a cinema sector in Africa, stakeholders must adapt to the unique needs and challenges of African economies.

In order to "find their feet", developers can explore modular and scalable cinema designs that allow for a phased expansion based on market demand and available resources.

Investigating government grants and tax breaks for cinema development, especially in underserved areas, can help mitigate financial burdens and incentivise investment, while public-private partnerships can help secure funding and mitigate financial risks. Indeed the African Development Bank's (AfDB) "Fashionomics Africa" initiative<sup>4</sup>, which supports the growth of the fashion and creative industries, could serve as a model for similar initiatives in the cinema sector.



Sustainability and environmental considerations should also be at the forefront of cinema development in Africa.

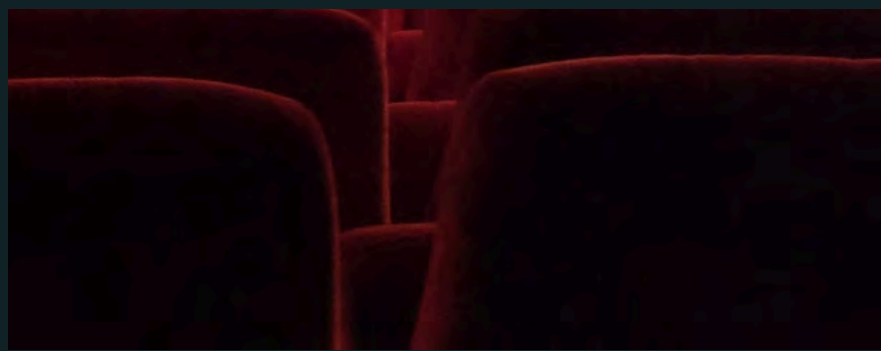
Prioritising locally sourced materials and labour can reduce construction costs while supporting local industries and creating jobs within the community. Cinemas can explore alternative energy sources like solar panels or hybrid power systems to reduce reliance on traditional power grids and ensure a reliable and eco-friendly experience. The Burkina Faso-based Ciné Guimbi<sup>5</sup>, for instance, has been using solar power to operate its outdoor screenings, showcasing the potential for sustainable cinema practices across the continent.

## Unique environments

Tailoring the cinema market to the unique preferences of African audiences is crucial for success, particularly where incomes are low.

Implementing tiered pricing structures, subscription models, and flexible ticketing options like mobile payments and discounted rates for families and students can make cinema experiences more accessible. In rural areas, innovative approaches like mobile cinemas with inflatable screens that can travel to remote villages, bring the cinema experience to people who might not otherwise have access.

The Mozambique Cinema Arena project, supported by the Italian NGO Cinemovel Foundation<sup>6</sup>, has been using mobile cinemas to screen films and documentaries in rural communities, promoting education and social awareness.





# African filmmaking

As the cinema sector in Africa grows, it is essential to foster local talent and support the development of African filmmaking. Governments and private investors can establish film funds, grants, and training programs to nurture aspiring filmmakers and provide them with the resources and platforms to tell their stories. The success of films like "The Wedding Party" in Nigeria<sup>7</sup> and "Rafiki" in Kenya<sup>8</sup> demonstrates the immense potential of African cinema to captivate audiences both locally and internationally.

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The development of cinemas in Africa represents a powerful catalyst for economic growth, social development, and cultural enrichment. By establishing cinemas within the formal economy, African nations can benefit from increased tax revenue, job creation, and the emergence of vibrant entertainment hubs that contribute to the overall economic health of the continent.

Through collaborative efforts, innovative approaches, and a commitment to sustainability, the rise of cinemas in Africa can provide countless benefits to its people and set the stage for a brighter, more inclusive future, where the magic of the silver screen brings people together and drives positive change.

## Endnotes

- [1] National Association of Theatre Owners (NATO), United States: "The Economic Impact of Movie Theaters" (2019)
- [2] PricewaterhouseCoopers (PwC): "Entertainment and Media Outlook: 2022-2026" (2022)
- [3] Nairobi Cinema, Kenya (<https://www.kfcb.go.ke>)
- [4] African Development Bank (AfDB): "Fashionomics Africa" initiative (<https://fashionomicsafrica.org/>)
- [5] Ciné Guimbi Burkina Faso (<https://www.cineguimbi.org>)
- [6] Cinemovel Foundation, Italy: "Mozambique Cinema Arena" project (<https://www.cinemovel.tv/en/progetti/mozambico-cinema-arena/>)
- [7] The Wedding Party (2016) (<https://www.imdb.com/title/tt5978822/>)
- [8] Rafiki (2018) (<https://www.imdb.com/title/tt8286894/>)







# Financing Green Cinemas

*Following our previous article, "Lights, Camera, Action!" on the benefits of developing cinemas in Africa, we progress to exploring how the green economy can be both a source of finance and an opportunity for a sustainable development for the sector.*

## Powering cinemas

Africa's abundant sunshine provides a unique advantage in harnessing solar energy, making it a cost-effective and environmentally friendly option for powering cinemas.

A rough estimate suggests that a 1-screen cinema would require a 30-40 kW solar system (the equivalent to about 1 tennis court of panels), while a 2-screen cinema would need a 50-60 kW system (about 1.5 tennis courts) and a 3-screen cinema would require a 75-90 kW system (about 2.3 tennis courts). For many developers, the roof space or land space around the cinema would provide more than enough land to accommodate this.

As many cinemas operate primarily at night, drawing on audiences that have worked throughout the day, using a battery system to store excess solar energy generated during the day is crucial. Any surplus energy can be sold back to the electricity grid, providing a possible additional revenue stream for the cinema operator.

While the upfront investment in solar technologies can be steep, in a short time they become financially very efficient and even a source of funding. Furthermore, by incorporating energy-efficient lighting and cooling systems, as well as water-saving and management systems, cinemas can significantly reduce both their costs and their carbon footprint.





In addition to solar power, piezokinetic energy generated from special tiles on the cinema floor can contribute to the overall energy mix. These tiles contain piezoelectric materials that generate a small voltage when pressure from a footstep is applied, harnessing the power of foot traffic in high-traffic areas like lobbies, hallways, and concession stands.

## Building cinemas

The choice of building materials also plays a significant role in minimising the environmental impact. Take bricks made from recycled plastic. They help conserve resources by using existing plastic instead of virgin materials, which require more energy and generate greenhouse gases during production. These are proven to be very strong and durable, lasting as long as traditional bricks, and they are lighter than traditional bricks, making them easier to transport and handle during construction, reducing labour costs (and potential injuries). And importantly, recycled plastic bricks can be designed with air pockets, which can improve thermal insulation properties compared to traditional bricks, leading to lower energy bills for heating and cooling.

Recycled plastic can also be used to create durable and comfortable seat covers which, depending on the type of plastic and processing methods used, can be waterproof, stain-resistant, and easy to clean. Furthermore, they can be used to create cup holders and durable armrests.

Certain plastics can be recycled into floor tiles and covers which are durable, slip-resistant, and easy to maintain; they can be made into signage like directional signs or concession stand menus. And they can be used as wall panels that are lightweight, fire-resistant, and that offer some sound-dampening / acoustics-enhancing properties.



Creating a unique brand with an inviting atmosphere in cinemas can also be achieved through the incorporation of upcycled or locally-made furniture and décor elements. By repurposing materials and supporting local artisans, cinemas can reduce their environmental footprint while showcasing the creativity and craftsmanship of local communities.

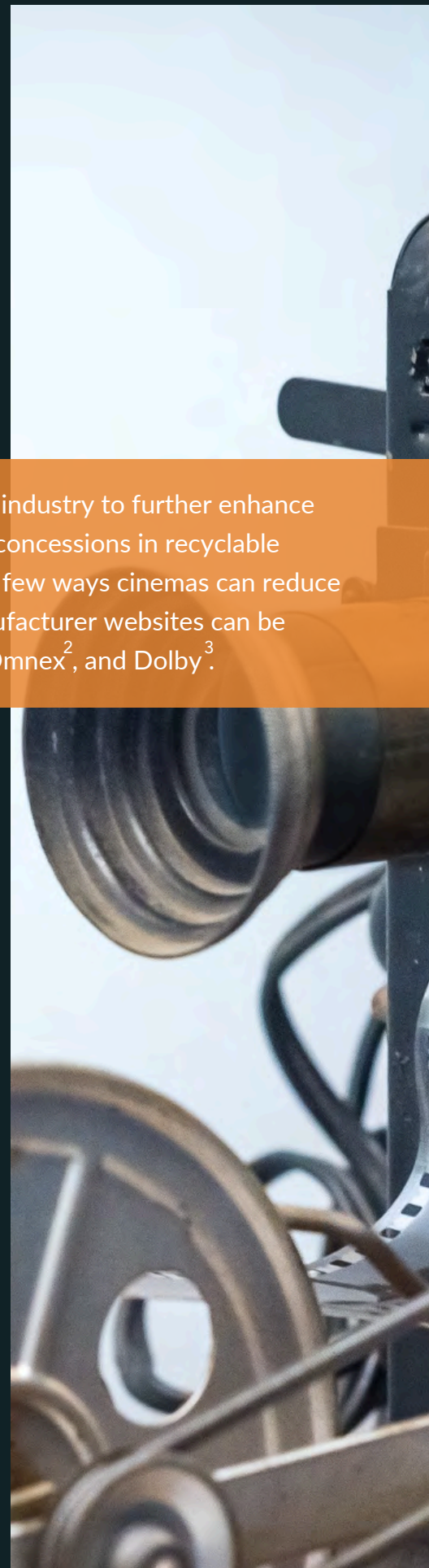
## Circular cinemas

The concept of a circular economy can be applied to the cinema industry to further enhance sustainability. Refurbishing existing cinema equipment, offering concessions in recyclable packaging, and incorporating upcycled décor elements are just a few ways cinemas can reduce waste and support local industries. Platforms like eBay and manufacturer websites can be searched for refurbished equipment from brands like Christie<sup>1</sup>, Omnex<sup>2</sup>, and Dolby<sup>3</sup>.

Effective waste management is another aspect of eco-friendly cinema operations. By implementing strategies such as composting food scraps from concession stands and recycling waste materials, cinemas can reduce the amount of waste sent to landfills, contributing to a cleaner and healthier local environment.

Operators can begin to minimise waste by encouraging patrons to bring reusable water bottles (and offering discounts for doing so). Certain snacks can be offered in compostable packaging, especially organic waste like popcorn kernels. And cleaning durable cleaning supplies can be adopted, reducing single-use items like paper towels and plastic cups.

Then operators can identify recyclables including plastic bottles (PET), glass bottles, aluminium cans, cardboard (from packaging boxes), and paper from napkins, flyers and tickets, all of which are much sought after by companies facing increasing pressures to use recycled materials







Areas can be set-up with designated bins for recyclables, clearly labelled with pictures or symbols, including organic waste which can be composted and used for local community gardens

Critical to this, however, is the education of both patrons and staff about proper waste sorting. This can be done through posters and announcements ... but you also have a large screen for showing short informational videos before movies!

## Financing Green

However, the transition to sustainable practices requires more than just good intentions—it needs financial support.

Development banks, local organisations, multilateral organisations, and impact investors are increasingly offering green loan programs and funding opportunities for businesses committed to sustainability. Funds like Africa Climate Ventures<sup>4</sup>, Infraco Africa<sup>5</sup>, Norfund<sup>6</sup>, and Trine<sup>7</sup> may be interested in looking at sustainable cinemas.

To tap into these financing opportunities, cinema developers must demonstrate a clear commitment to sustainability in their business plans and operations. Conducting environmental impact assessments, setting measurable sustainability targets, and incorporating green design and technologies into their projects are essential. Partnering with local environmental organisations and engaging in community outreach can also strengthen a cinema's green credentials and attract impact investors.

Carbon offsetting programs provide another avenue for cinemas to mitigate their environmental impact. By investing in projects that reduce or remove greenhouse gas emissions, such as reforestation or renewable energy development, cinemas can compensate for their own carbon footprint and contribute to the global fight against climate change.

## Social benefits

Cinemas have the unique ability to engage and inspire their audiences, and this power can be harnessed to promote environmental awareness and sustainable living.

Curating eco-conscious programming, hosting educational workshops, and collaborating with local environmental organisations are just a few ways cinemas can use their platform to drive positive change.

## Government support

Government policies and incentives can play a crucial role in accelerating the adoption of sustainable practices in the cinema industry. By advocating for regulations that promote green building standards and incentivise the use of renewable energy, stakeholders can create an enabling environment for the growth of eco-friendly cinemas.



## Conclusion

Cinemas in Africa present a remarkable opportunity to prioritise sustainability and environmental responsibility from the ground up. By embracing eco-friendly construction and operations, adopting circular economy principles, exploring innovative financing options, engaging audiences, and leveraging Africa's unique advantages, the cinema industry can pave the way for a greener and more sustainable future.



As the industry continues to evolve, it is crucial for stakeholders to collaborate, share best practices, and push the boundaries of what is possible in terms of sustainability. By doing so, African cinemas can not only provide entertainment and social benefits to their communities but also serve as beacons of hope and inspiration in the global fight against climate change. Cineplex Canada is the textbook example of this<sup>8</sup>.

In our opinion, the future of African cinemas is green, and by embracing this vision, we can create a world where the magic of the silver screen goes hand in hand with the preservation of our planet's resources.

Let us seize this opportunity and build a cinema industry that is not only economically viable but also environmentally responsible, setting an example for the rest of the world to follow.

## Endnotes

[1] <https://www.christiedigital.com/products/clearance-center/>

[2] <https://www.omnex.co.uk/approved-used>

[3] <https://professional.dolby.com/cinema/>

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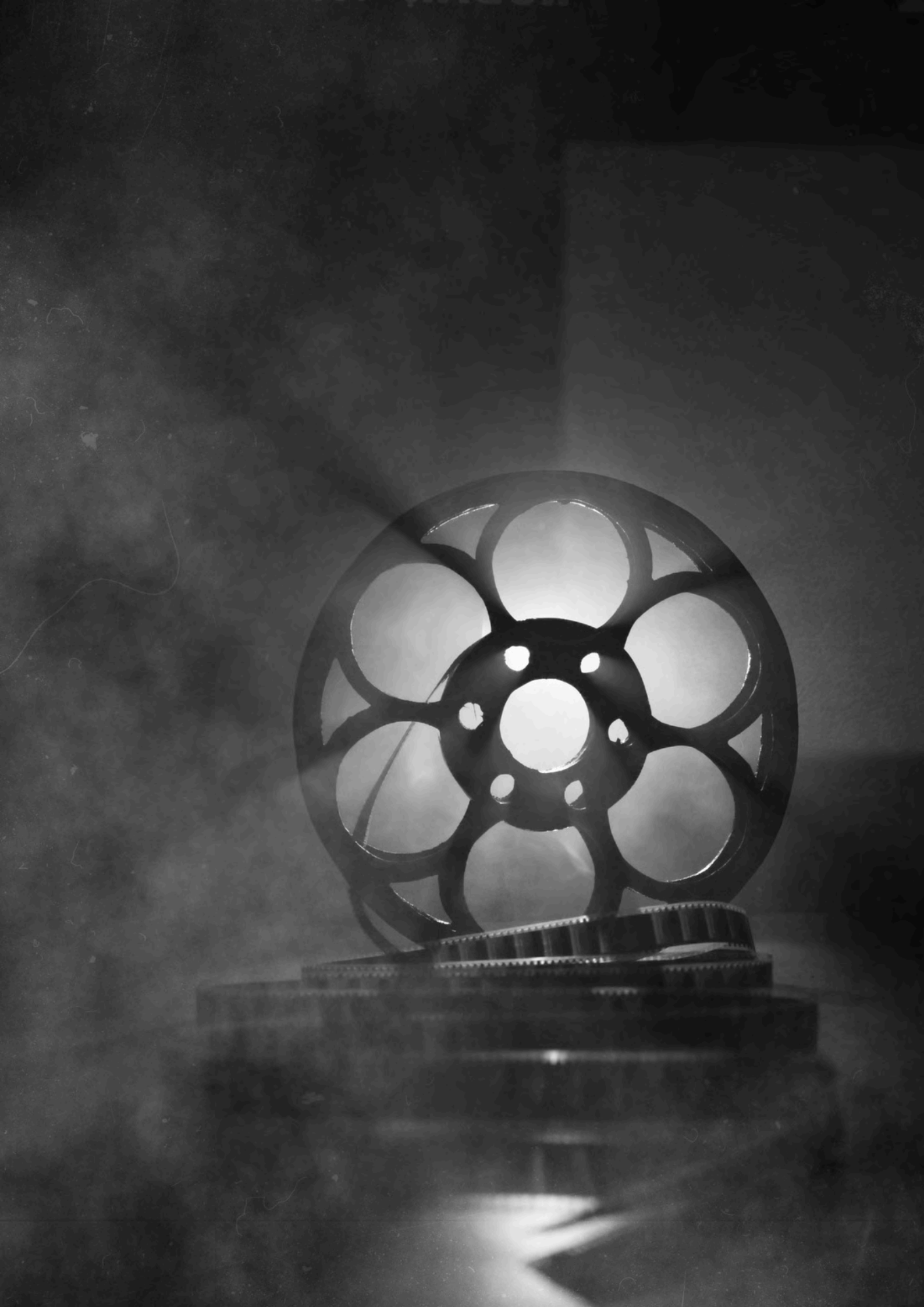
[5] <https://infracoafrica.com/>

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[7] <https://trine.com/start>

[8] <https://mediafiles.cineplex.com/investor-relations/governance/ESG%20Statement.2022.Q1.pdf>





At KAGE Advisory, our mission is to empower governments, businesses, and organizations to create a sustainable, green economy for future generations. Our experts are passionate about addressing global environmental challenges and have extensive experience in sustainable development, green finance, and carbon credits.

We believe that sustainability is not only an environmental necessity but also a catalyst for innovation, job creation, and long-term economic growth. By working together, we can unlock the full potential of the green, blue, and circular economies and create a better world for all.

**Dominic Parker**

+44 78 80 33 40 24

d.parker@KAGEadvisory.com

United  
Kingdom

**Muvirimi Kupara**

+44 75 08 07 68 35

m.kupara@KAGEadvisory.com

United  
Kingdom

**Delphin Kaze**

+257 68 09 92 17

d.kaze@KAGEadvisory.com

Burundi

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