

ONE PLANET FILMS PRESENTS



COP30
BRASIL
AMAZÔNIA
BELÉM 2025

UN Official Side Event

POWER PLAY

HOW AI IS REWRITING THE ENERGY EQUATION

DIRECTOR SYLVESTER NDUMBI WRITER HARRIE VREDENBURG PRODUCERS SYLVESTER NDUMBI/HARRIE VREDENBURG
DOP KAYDYN ROSS SOUND RECORDER DAN GRETTON PRODUCTION MANAGER MICHELLE BARON EDITOR BADRIA ABUBAKER/SYLVESTER NDUMBI
A FILM BY VREDENBURG FILMS AN ORIGINAL ONE PLANET FILMS PRODUCTION COMPANY SIMBA CREATIVE COMPOSERS TIMOTHONIUS ALAI

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SIMULATION

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Vredenburg Films & Simba Creative Presents

POWERPLAY

Running Time.....	1:20:55
Genre.....	Documentary
Rating.....	PG
Year.....	2027
Language.....	English
Country of Origin.....	Canada
Format.....	4096x2160, 23.98fps, 1.66:1, 5.1 Surround Sound
	One Planet Films
Sales/Distribution.....	admin@oneplanetfilms.net
Links.....	Official Website: www.oneplanetfilms.net

Synopsis

The world is at a crossroads. Energy demand is soaring. Climate disasters are intensifying and insurance costs are skyrocketing. And global divisions are deepening. Instead of coming together to confront these challenges, societies are growing more polarized—left vs. right, energy security vs. climate action, transition vs. tradition. With the stakes higher than ever, can we still find common ground—or are we already too late?

As the race for energy accelerates, driven by the rise of AI and the electrification of everything, we are pushing energy needs into uncharted territory. Massive data centers—some the size of entire cities—are being built to power the AI revolution, consuming staggering amounts of electricity, while millions worldwide still live without reliable power. For years, global leaders promised that a transition to renewables and nuclear would solve the climate crisis. But in this new era, that vision is under pressure. Is it time to move beyond the old model? Is it time to stop talking about energy transition—and start talking about responsible energy addition?

The demand for more energy is inevitable. The question is whether that demand will drive climate collapse—or spark bold innovation and clean investment? Can we scale up responsibly, or will we sacrifice the planet in the name of progress?

POWERPLAY redefines the global climate conversation. This documentary explores the collision between politics, technology, and humanity's energy future. Through cutting-edge innovation, bold policy, and deeply human stories, it asks: Can we build a future that works for everyone—or are we clinging to solutions that no longer fit the crisis? The battle for our planet has begun. The outcome will shape the next century—and the lives of generations to come.

Coming Soon

Writer's Statement

Artificial intelligence is rapidly changing how we live, work and solve problems. It is helping us analyze vast amounts of information, automate routine tasks, accelerate scientific discovery and create new possibilities. Like earlier transformative technologies, AI will disrupt industries and jobs while creating new ones.

But this revolution has an enormous appetite for energy.

The data centres that train and operate AI models require vast amounts of electricity. That demand comes as developing countries across the Global South are consuming more energy as hundreds of millions of people seek greater prosperity and improved standards of living.

This dilemma lies at the heart of our film. AI and global economic development are increasing electricity demand faster than new low-carbon generation can be built. Natural gas, alongside renewables and nuclear power, and in some regions coal, is filling the gap. Yet climate change is not waiting.

We have crossed the Rubicon with AI. There is no turning back. Nor can we simply give up on addressing climate change.

We need to confront the world as it is: energy demand is growing, AI is accelerating that growth, and atmospheric carbon continues to accumulate. This film asks whether innovative climate-finance models, carbon removal and permanent carbon storage can help reconcile these competing realities.

For more than 30 years, my research and teaching have explored the intersection of innovation, technology, economics and science. Two decades serving on the boards of international energy companies and environmental organizations have also given me a close view of the possibilities and constraints of transforming our energy systems.

But my motivation for making this film is ultimately personal.

I am the grandfather of five young children. Their generation will live with the consequences of the choices we make today. That drove me to collaborate with award-winning filmmaker Sylvester Ndumbi on this documentary, not simply about the climate and energy challenges before us, but about the new ideas that might allow us to confront them.

Director's Statement

We are operating within a climate framework that is being rapidly overtaken by new realities. *Powerplay* comes from that tension. As we accelerate efforts toward energy transition, we are also witnessing the rise of artificial intelligence, one of the most energy-intensive revolutions in human history. Massive data centers are expanding rapidly, driving energy demand to levels we have never seen before.

At the same time, in the Global South, where I am originally from, millions of people still live without reliable electricity. For them, energy is not about reduction. It is about access.

This is the contradiction at the heart of this film.

PowerPlay does question whether as a society, we should shift our conversation from Energy Transition to Energy Addition. The film explores a broader reality: one of where the challenge is not only to reduce emissions, but to produce significantly more energy, cleanly and equitably, at a global scale.

Because the questions we face are becoming unavoidable:

- Can energy supply keep up with explosive demand?
- Are we building systems that require constant, increasing power?
- And what happens to those still waiting for access?

This film does not enforce a single narrative. It investigates the systems, assumptions, and trade-offs shaping our future—bringing together diverse perspectives to better understand what lies ahead.

I believe *Powerplay* has the potential to become a cultural moment—a film that reframes how we think about energy, climate, and progress, and that continues to resonate in classrooms, policy discussions, and public discourse.

Because the future will not be defined only by how we reduce energy, but by whether we can build enough of it, for everyone.

Harrie Vredenburg, PhD

Producer/Writer Bio

Harrie Vredenburg is a researcher, educator and documentary producer specializing in innovation, sustainability and the global energy industry. He is Faculty Professor of Strategy and Global Management at the University of Calgary's Haskayne School of Business, a Research Fellow at its School of Public Policy, and International Research Fellow Emeritus at Oxford University's Saïd Business School.

Vredenburg has published extensively on energy, innovation and sustainability, with research cited more than 10,000 times, and has served for 20 years on the boards of international public and private energy companies, championing emissions reduction and environmental, social and governance initiatives.

With filmmaker Sylvester Ndumbi, he produced *Without Leaving Anyone Behind: Humanity at an Energy Crossroads*. The documentary was screened at the 2023 World Petroleum Congress and selected by the United Nations as an official Side Event at the COP28 Climate Summit in Dubai, followed by film festival and cinema screenings in North America and Europe.

Drawing on decades of experience at the intersection of energy, technology, business and public policy, Vredenburg brings to this film a perspective shaped by both research and first-hand engagement with the energy industry as it confronts the competing demands of rapidly growing electricity consumption, technological change and climate action.

Sylvester Ndumbi

Producer/Director Bio

Sylvester Ndumbi is an award-winning filmmaker and producer with over a decade of international experience creating premium unscripted and scripted content. His work has screened globally and engaged audiences at the highest levels of policy, culture, and entertainment.

Most recently, Ndumbi was invited by the United Nations to present POWERPLAY, his upcoming documentary, co-produced with Harrie Vredenburg, in Brazil — a major international recognition of his leadership in climate and energy storytelling. His previous documentary, co-produced with Harrie Vredenburg, Without Leaving Anyone Behind, was selected as an official UN side event at COP28 in Dubai and has since achieved global distribution.

In the scripted space, Ndumbi recently produced the drama series, My African Family, distributed in 10 countries, including Canada, with the series now commissioned for a second season, demonstrating both creative vision and international market viability.

Beyond production, Ndumbi serves as a Board Member of the Alberta Foundation for the Arts, where he helps steward significant public investment into the province's creative sector.

Featured Interviews

EDMONTON

Dr. Rick Chalaturnyk - Professor of Geotechnical Engineering, University of Alberta.
Energi Simulation Research Chair in Subsurface Energy

Dr. Sebastian Lopez Saavedra - Postdoctoral Fellow, Civil and Environmental Engineering, University of Alberta

Dr. Mahsa Shafaei Bajestani - Postdoctoral Fellow, Geotechnical and Geoenvironmental Engineering

University of Alberta Lab

Jhon Uribe-Patino

Bhavesh Marker

Victor Kwok

Bingyu Xie

Stephen Talman

Jakob Brandl

Samuel Tepes-Billa

Mohamed Hamad

Dmytro Pantov

Featured Interviews

CALGARY

Dr. Apostolos Kantzas –Professor of Chemical and Petroleum Engineering, University of Calgary. Energi Simulation Research Chair in Energy Transition

Dr. Anne Kleffner – Professor and Chair Holder, Risk Management & Insurance, Haskayne School of Business, University of Calgary

Dr. Mohammad Keyhani – Associate Professor, Entrepreneurship, Haskayne School of Business, University of Calgary

Honourable Ken Hughes – Former Alberta Minister of Energy

Stephen Mason – Chairman & CEO, Reconciliation Energy Transition Inc.

ADDITIONAL

Wilder McCrimmon

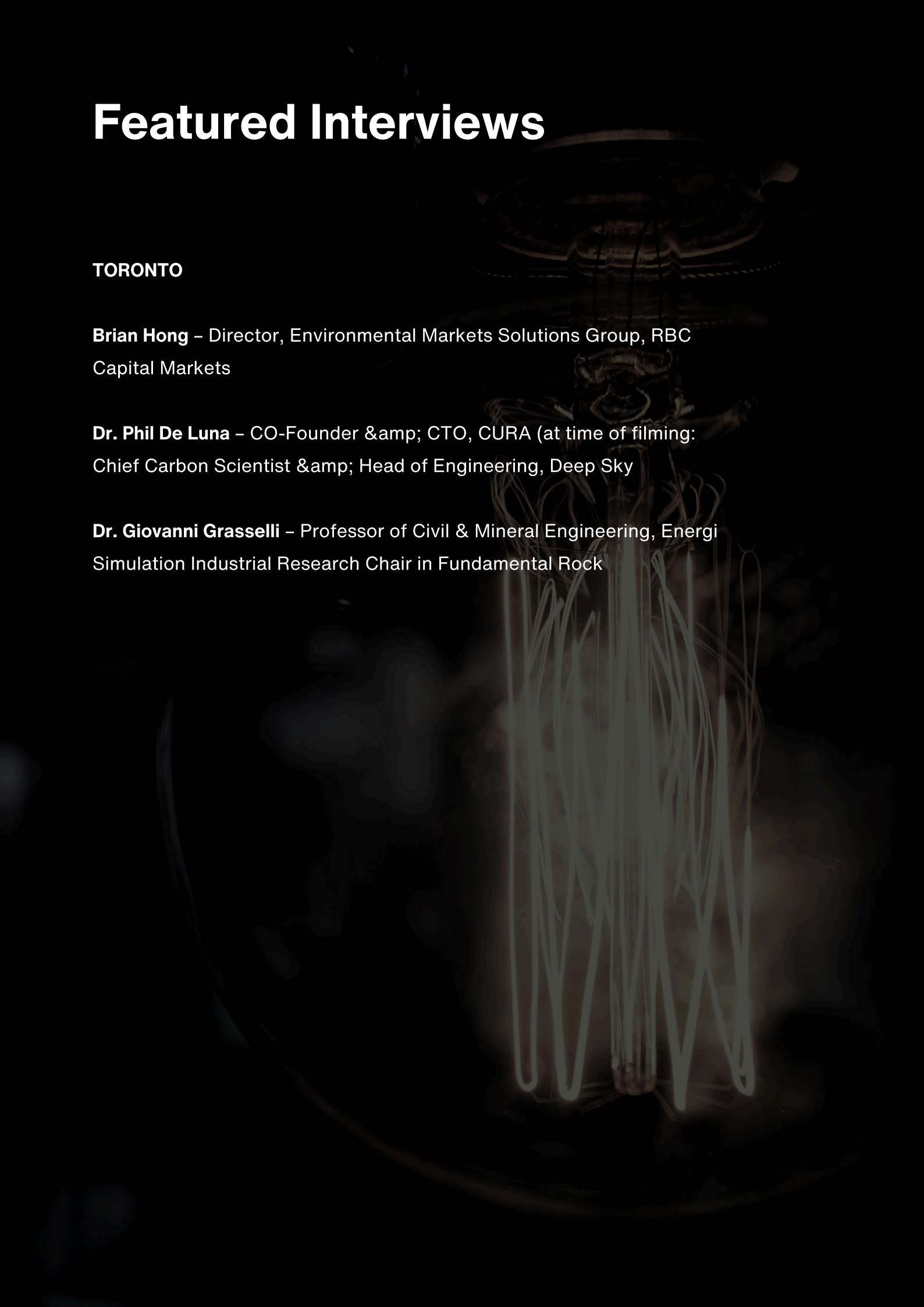
Rivers McCrimmon

Stafford Benson

Beatrix Benson

Vanessa Vredenburg

Featured Interviews



TORONTO

Brian Hong – Director, Environmental Markets Solutions Group, RBC
Capital Markets

Dr. Phil De Luna – CO-Founder & CTO, CURA (at time of filming:
Chief Carbon Scientist & Head of Engineering, Deep Sky

Dr. Giovanni Grasselli – Professor of Civil & Mineral Engineering, Energi
Simulation Industrial Research Chair in Fundamental Rock

Featured Interviews

NETHERLANDS

Dr. Hadi Hajibeygi – Professor of Geo-Energy Solid & Fluid Mechanics, Delft University of Technology, Energi Simulation Research Chair

Dr. Sebastian Geiger - Energi Simulation Research Chair in Sustainable GeoEnergy

Valeria Nogales Herrera – PhD Researcher, Geothermal Energy, Delft University of Technology

Hester Claridge – PhD Researcher, Geothermal Energy, Delft University of Technology

Willemijn van Rooijen – PhD Researcher, Underground Hydrogen Storage

Eva Lopes Dias – Owner, Restaurant De Struisvogel

drs. E.W.E. (Esther) Pijs – Director General for Green Growth Realization, Ministry of Climate and Green Growth, The Hague – The Netherlands

Featured Interviews

NORWAY

Erna Solberg – Former Prime Minister of Norway

Kari Nessa Nordtun – Minister of Education

Terje Assland – Minister of Energy

Tim Heijn – Managing Director, Northern Lights JV

Esther Pijs – Ministry of Economic Affairs and Climate Policy The Netherlands

Dr. Dominik von Achten – CEO Heidelberg Materials

Kai Arne Sætre – CCS Process Engineer, Heidelberg Materials

Frederic Hauge – Founder of the Bellona Foundation

ADDITIONAL

Stine Grimsrud – Senior Communications Advisor, Prime Minister's Office (at time of filming: Senior Advisor, Department of Communications, Ministry of Energy)

Bellona: Rebecka Larsson

Bellona: Olav Oye

Bellona: Hannah Biro

Bellona: Fabian Liss

Bellona: Amrei Milch

Featured Interviews

KENYA

Martin Freimüller — Co-Founder & CEO of Octavia Carbon

Duncan Kariuki – Co-founder & CTO, Octavia Carbon

**Specioser Mutheu — Communications Manager,
Octavia Carbon**

Okelo Onyango – Operations Lead and Plant Manager, Octavia Carbon

Peter Scott – Founder & CEO, Burn Manufacturing

Chris McKinney — Chief Commercial Officer, BURN Manufacturing

Kevin Kinyua – R & D Mechanical Engineer, Burn Manufacturing

Timothy Muchiri – Production Officer, Burn Manufacturing

Valentine Tenge — Investment Analyst, Kenya Climate Ventures

Sherie Gakii — Greenpeace Africa Communications Manager

**Amos Burudi Wemanya — Greenpeace Africa Responsive
Campaigns Lead**

James Kamukuru — Livestock farmer/ Pastrolist

Gideon Kanchory — Recent University Graduate

Natalie Amugitsi - Sales Manager, KOBE TOUGH

ADDITIONAL

Kevin Kindka

Featured Interviews

BRAZIL

Dr. Leonardo Guimaraes – Professor, Department of Civil Engineering, Federal University of Pernambuco, Energi Simulation Industrial Research Chair

Mary Nyange Ndambo – Ministry of Environment, Sustainable Development, and Climate Economy, Kinshasa

ADDITIONAL

Gina Nohemy Ruiz Caro Rothgiesser

Ramiro Froián Vargas Canelos

Raoua Tlili

Rainer Knobloch



Crew

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SYLVESTER NDUMBI

Writer
HARRIE VREDENBURG

Producers
SYLVESTER NDUMBI
HARRIE VREDENBURG

Co-Producer
MICHELLE BARON

Executive Producer
MICHAEL GLOSSOP

Production Manager
MICHELLE BARON

Senior Advisor
JENNIFER MAGUIRE

CANADA CREW

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KADYN ROSS

Aerial Photography
SWAN PRODUCTIONS

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AVA WILD
JEVAN BAILEY
SHAE PATTERSON
SEAN KERR

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Sound Engineer
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AD Trainee
BADRIA ABUBAKER

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ANA LUCIA TOSO MINAYA
MIMI HUSZTI
PRISCILLA CHERRY

Art Director
KEISHA RUSSELL

Crew

KENYA

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ASHTON JUMA OMITO

Production Assistant
WANGUI NGUNGIRI

Production Assistant
WILSON KARIUKI GICIRA

Driver
SIMON THUO

Driver
DAVID MIGWI

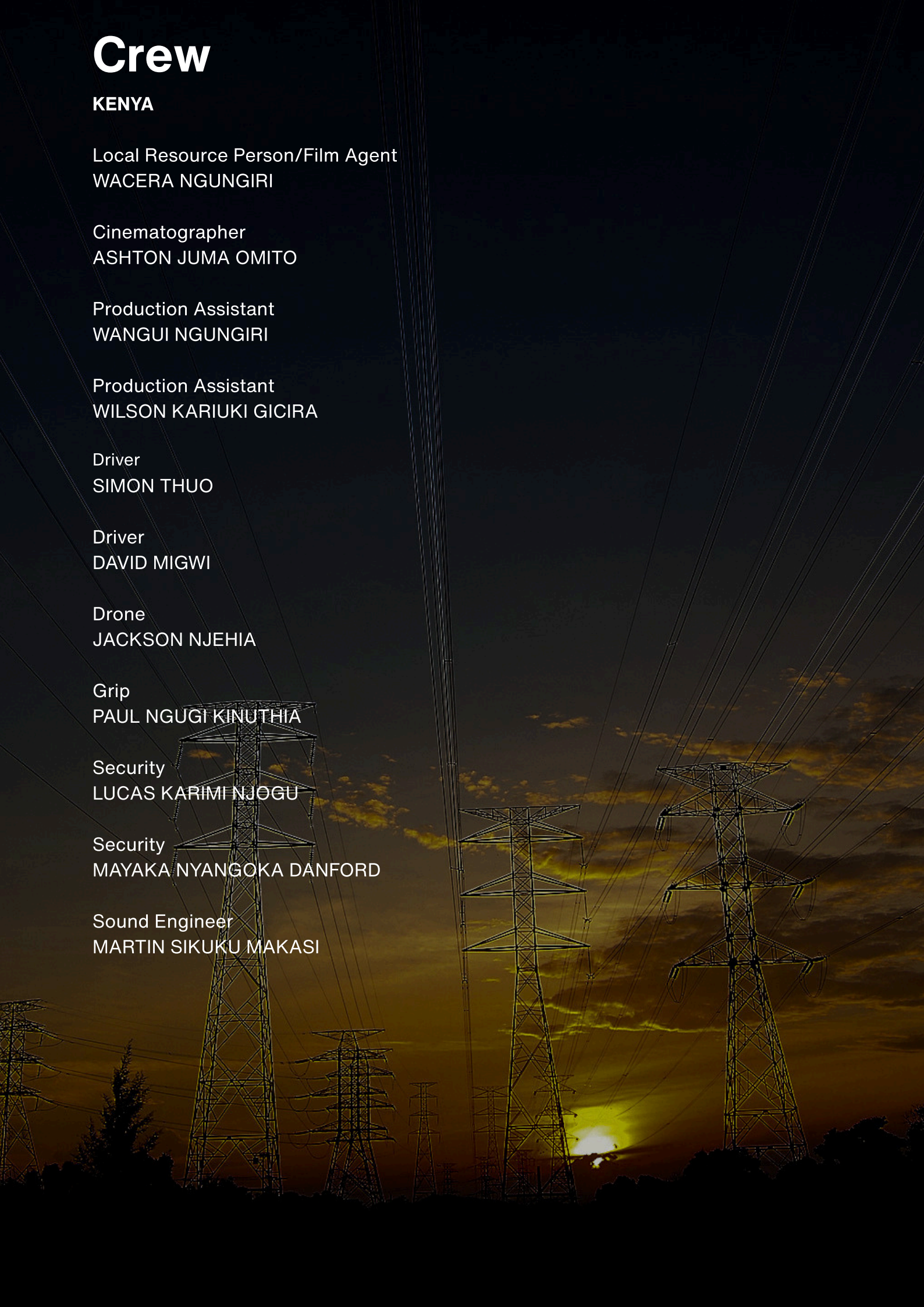
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PAUL NGUGI KINUTHIA

Security
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Post Production

Post Production provided by
YULU STUDIOS

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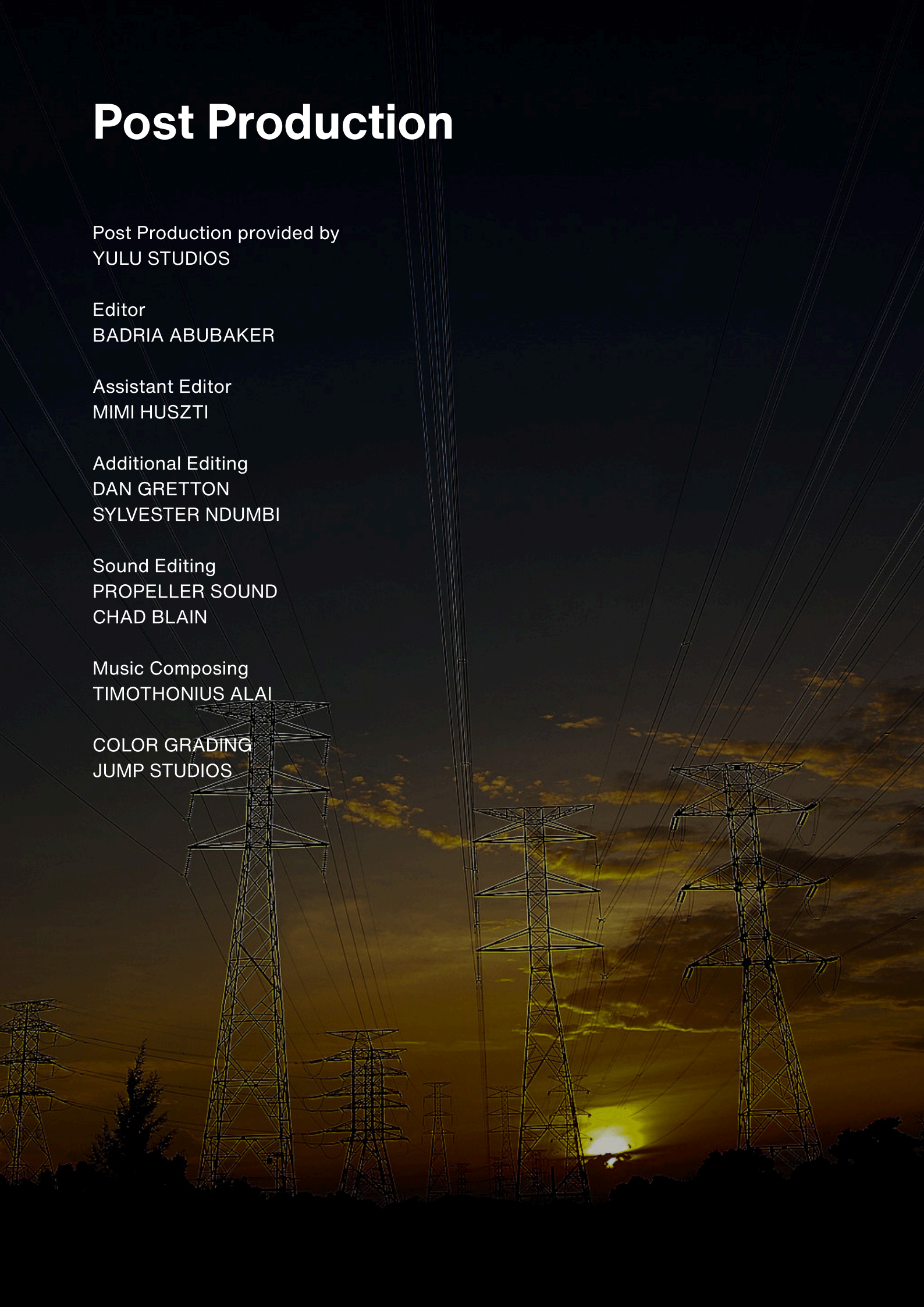
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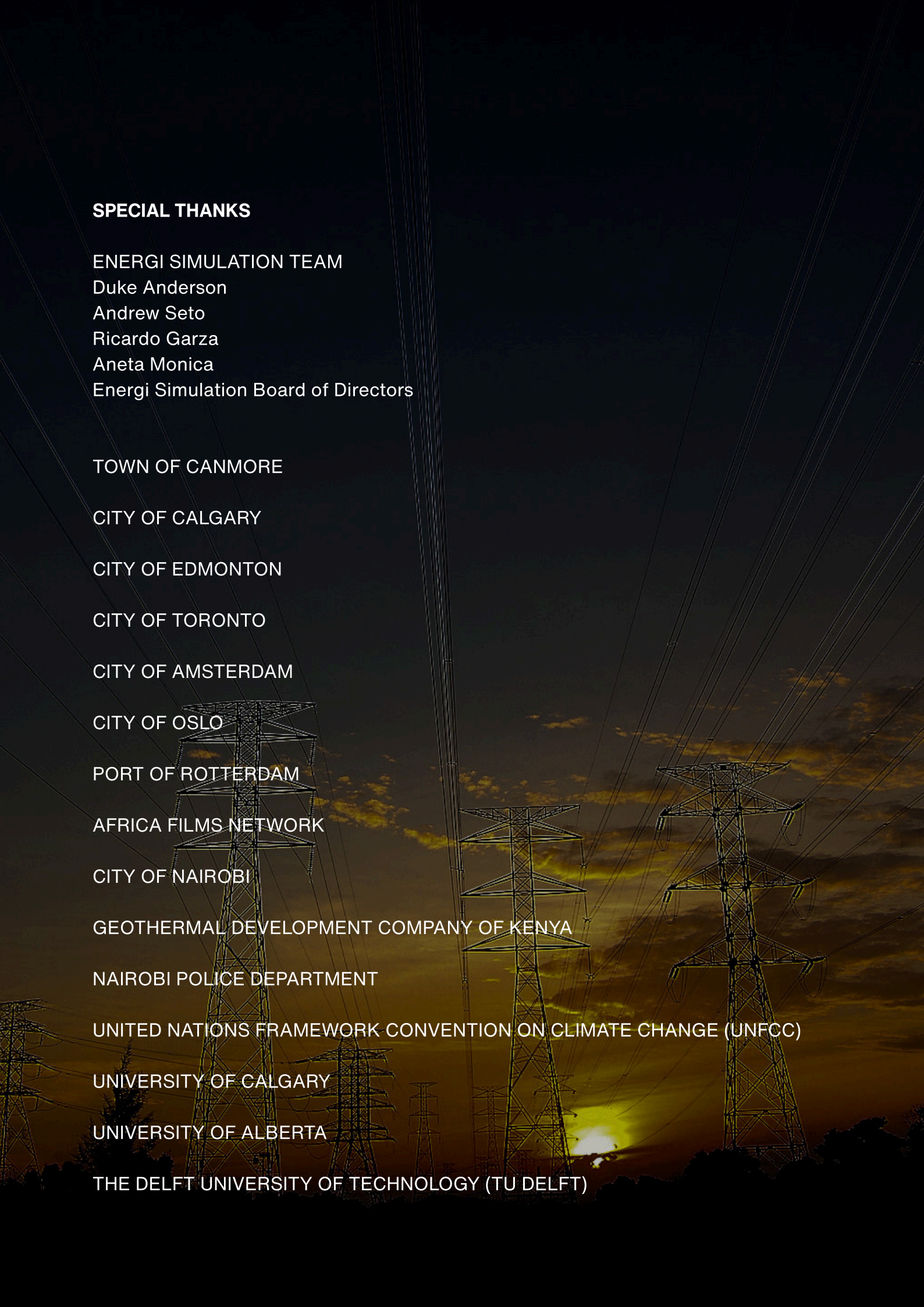
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JUMP STUDIOS





SPECIAL THANKS

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Andrew Seto

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Aneta Monica

Energi Simulation Board of Directors

TOWN OF CANMORE

CITY OF CALGARY

CITY OF EDMONTON

CITY OF TORONTO

CITY OF AMSTERDAM

CITY OF OSLO

PORT OF ROTTERDAM

AFRICA FILMS NETWORK

CITY OF NAIROBI

GEO THERMAL DEVELOPMENT COMPANY OF KENYA

NAIROBI POLICE DEPARTMENT

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

UNIVERSITY OF CALGARY

UNIVERSITY OF ALBERTA

THE DELFT UNIVERSITY OF TECHNOLOGY (TU DELFT)

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BURN Manufacturing

NORTHERN LIGHTS

HEIDELBERG MATERIALS

NORWEGIAN MINISTRY OF ENERGY

DEEP SKY

BEACON AI CENTRES

ROYAL BANK OF CANADA

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*THE FILMMAKERS WOULD LIKE TO THANK EVERYONE THAT TOOK
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