

PROUNENFILM

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MEGACITIES • NEW FOOD • NEW GREEN ECONOMY • CORE RAW MATERIAL • MICRO CHIP • DEFEAT THE CANCER DISEASE

THIS IS
THE RACE FOR FUTURE

"Shaping Tomorrow's World"

6x52'

THE RACE FOR FUTURE

6x52'

SERIES OVERVIEW

In **'The Race for Future'** viewers are invited on a captivating journey through the corridors of time and imagination, where the relentless march of progress intertwines with the boundless potential of human ingenuity. With each episode serving as a window into the future, this documentary series ignites the imagination and challenges preconceived notions about what lies ahead.

The series embarks on an exploration of the relentless pursuit of progress, a race fueled by the collective ambition to shape a better tomorrow. Across six enthralling episodes, viewers are treated to an immersive experience that spans continents, disciplines, and ideologies, all in the quest to unravel the mysteries of tomorrow's world.

From the towering skylines of the race to build **megacities** to the microscopic realms of the race for **micro-chip** development, each instalment offers a unique perspective on the multifaceted tapestry of our future.

It's a journey that traverses the realms of urbanization, technology, medicine, energy, and beyond, leaving no stone unturned in its quest to illuminate the path forward.



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Max Serio, a renowned TV and film producer, director, content creator, and the visionary behind the formation of Picasso Film. With a stellar track record, Max has made his mark as an executive producer, director, and creator on various esteemed platforms, including Netflix, National Geographic, Curiosity Stream, ZDF, Discovery Channel, RAI, France Télévision, RTL Germany, RMC, ITV, BBC, A&E, and History Channel. Over the past 14 years, in collaboration with www.bigmedia.tv Max has played a key role as an associate producer, contributing to the production of over 250 hours of documentary series that have been widely distributed and broadcasted worldwide



Michael Trabitzsch is an author, director and producer. He lives in Berlin, Germany. He established PROUNEN FILM in 2004 as a practice for documentary programs and the webContent agency prounenweb in 2016. Among his previous/recently produced programs are: Charlotte Rampling – The Look, The History of Death, Max Beckmann, The Noble Villas of Tuscany, The City of Tomorrow, The Angels Chronicle, The Mission of the Geniuses, The Proteome Code, Stalin's James Bond, Immigration Europe, The Landscape of the first American Settlers, David Hockney – Time Regained.

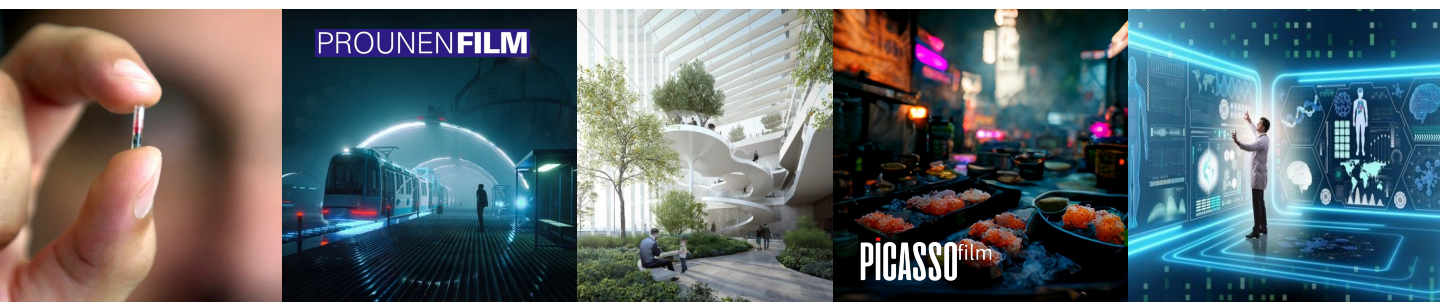
As the producer of "**The Race for Future**," this documentary series is our passionate endeavor to immerse viewers in an exhilarating journey through time and imagination. With every episode, we want to personally invite you to join us on an exploration of the endless possibilities that lie ahead.

Our aim is to captivate your senses and ignite your curiosity, challenging you to envision a future that surpasses our wildest dreams. Through compelling storytelling and captivating visuals, we strive to transport you into a realm where the relentless march of progress intertwines with the boundless potential of human ingenuity.

Each installment is not just a window into the future; it's a personal quest to challenge preconceived notions and expand our understanding of what's possible. From the bustling metropolises of tomorrow to the intricate world of cutting-edge technology, we want to take you on a journey that leaves no stone unturned in its quest to illuminate the path forward.

But beyond the grandeur of skyscrapers and the intricacies of innovation, **it's the human stories that truly inspire us.** Meeting the visionaries, dreamers, and innovators behind the scenes fuels our passion for this project. Their stories remind us that the future isn't just about progress; it's about the people who shape it.

Let's embark together on a journey that will challenge, inspire, and **ultimately redefine our understanding of what it means to race towards the future.**



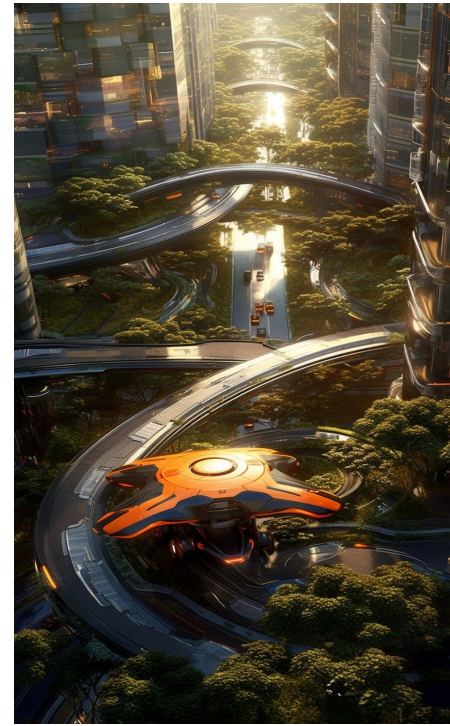
EPS 1: THE RACE FOR MEGACITIES

THE CITY IN THE FUTURE

In the imminent future, cities must undergo transformation, necessitating a new and intelligent equilibrium with resources like land, water, food, and energy.

This imperative is particularly acute for major cities and sprawling metropolitan areas, especially in Asia where rapid urbanization persists. However, it also applies to large cities across the Americas and Europe.

We aim to explore the essential components of future cities, with Asian megacities leading the way as potential models. These cities are already experiencing the impacts of climate change, massive urbanization, and dwindling resources. We'll examine innovative approaches from pioneering cities such as Singapore, Shenzhen, Seoul, Tokyo, and New York.



KEY FOCUS AREAS

Public Transport: Tokyo boasts the world's largest and fastest transport system, while cities like Singapore and Shenzhen have made strides in transitioning to electric buses.

Electric Mobility and AI Control Systems: Shenzhen, Singapore, and New York are leading the charge.

Decentralization: Initiatives in Shenzhen, Seoul, New York City, and Tokyo explore the idea of interconnected cities or districts.

Smart Homes: Tokyo and Singapore are leading the way, with homes doubling as power plants capable of generating energy.

Nature Integration: Cities like Singapore and New York are pioneering new housing models that prioritize reintegration of nature into urban environments.

Circular Systems: Exploring recycling and resource management initiatives.

Challenges Facing Today's Cities: As cities continue to grow, they must densify and build taller while minimizing energy consumption. Landmarks of vibrant cities should be energy-efficient and equipped with smart technologies to conserve resources. They should also function as self-sufficient urban hubs offering comprehensive amenities within, reducing reliance on private cars.

Revival of Landscaping: Cities like Singapore and Shenzhen prioritize green spaces, parks, and forests to combat urban heat and enhance air and water quality.



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EPS 2: THE RACE FOR A NEW FOOD SYSTEM

Earth's land already degraded, the urgency of reimagining our food system looms large. Climate change and resource scarcity demand radical agricultural redesign. Drawing from ancient farming wisdom and cutting-edge technology, a shift toward closed-loop systems promises larger, more sustainable harvests. This investigation unveils a circular, resource-conserving future for our food supply.

THE NEW FARMERS

Our current food system faces a critical dead end, with 70% of non-ice land globally already altered, projected to reach 90% by 2050. Food waste compounds the issue, consuming a quarter of freshwater and land larger than China, with 40% spoiling in rich countries' fridges and 40% lost in developing countries during harvest.

However, hope emerges from laboratories worldwide, where researchers are developing a new food system to combat factory farming and land overuse. This closed-loop system, blending futuristic innovations with traditional farming wisdom, promises larger quantities of nourishing food locally and resource efficiency.

Part 1 of our documentary introduces the visionaries driving this agrarian revolution, from DARPA in the US, creating food from air, water, and electricity, to Japanese researchers growing high-end Wagyu beef in labs. Innovations like vertical farming and lab-grown meat offer astounding improvements in efficiency and environmental sustainability. These advancements form a circular system that can feed the world's growing population without compromising our environment's health.

THE NEW TECHNOLOGY

An alliance of ancient wisdom and cutting-edge technology is driving a paradigm shift in agriculture. Vertical farming, for example, can yield up to 40 times more produce than traditional methods, using only a fraction of the resources.

Governing bodies like the World Food Council and the UN's FAO have long recognized the need for agricultural transformation. Today's reliance on fertilizers and pesticides is unsustainable, threatening soil health and exacerbating climate change. The new system prioritizes multi-field agriculture and innovative irrigation methods to regenerate soil and reduce water usage.

Our investigation into integrated agriculture showcases real-world examples worldwide, illustrating how efficiency leads to resource conservation and stable food prices. By blending modern techniques with ancient practices like crop rotation and intercropping, we're witnessing a new agricultural revolution unfold.



EPS 3: THE RACE FOR THE CORE RAW MATERIAL

In our seemingly dematerialized world, where intangible values like apps and online services dominate, the reality beneath the surface tells a different story. Pursuing environmental goals demands more materials, like those needed for electric cars and renewable energy, leading to increased extraction from the earth. Our current rate of material extraction far surpasses historical levels, with a growing appetite for resources. This episodio explores the possibility of a future shortage of essential elements due to overpopulation, urbanization, and technological innovation, prompting a reevaluation of our dependence on these resources. While vast mines may suggest an infinite supply, the crucial battle for these commodities unfolds in advanced labs, where scientists seek substitutes for increasingly scarce materials.

The 4 main materials are

SAND_SALT_COPPER +LITHIUM_IRON/STEEL

In this episode, we explore four fundamental materials crucial to our material world's foundation.

We'll investigate their significance, scarcity, and future implications, upon which our future relies. From **sand's** perceived ubiquity to the strategic importance of metals like **lithium and cobalt**, we'll uncover how these materials shape industrial and technological innovation, driving growth and progress. **Salt** and its derivatives, essential in food, agriculture, and pharmaceuticals, also come under scrutiny.

The episode highlights our global reliance on these resources and the pressing need for sustainable practices amid increasing pressure to meet demand.

We'll visit key locations and processing sites, showcasing the intricate technological transformations and the imperative of smarter resource usage.

With experts worldwide, we'll confront the challenge of resource finiteness and discuss pathways towards a new economy and sustainability.



EPS 4: THE RACE FOR MICRO CHIP

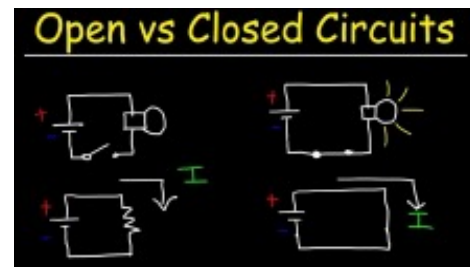
Everything starts with a 1 and a 0. All our computing power, all our data, is based on this binary. The episode delves into the origins of computing, tracing back to the humble beginnings of binary code. Sixty years ago, a chip had only four transistors, compared to today's 11.8 billion. We explore the visionary researchers and entrepreneurs who laid the groundwork for the computer industry, facing formidable challenges along the way. We reconstruct the evolution of the microchip, profiling key figures and their monumental contributions. Inspired by Chris Miller's book "Chip War," the episode offers an insightful journey into the past while contemplating the limitless potential of technology in shaping our future.

Pioneers: The pioneers behind these transformative events hailed from diverse corners of the globe. **Akio Morita**, founder of **SONY**, gained insight into the future while developing heat-seeking missiles during World War II. **Morris Chang**, a refugee from China, later founded **TSMC**, the world's largest semiconductor manufacturer. **Andy Grove**, a Hungarian immigrant, co-founded **INTEL**, driving the PC industry. **William Shockley**, raised in California, made significant contributions to semiconductor technology. Their collective efforts in the semiconductor industry, from Silicon Valley's inception to the Cold War era, reshaped history, ushering in an era where semiconductor technology holds the key to military and economic supremacy.

The semiconductor industry has been instrumental in shaping history through technological innovation, global competition, and strategic alliances. Beginning with Silicon Valley's emergence and the Cold War context, it witnessed shifts in dominance from American labs to Japanese firms and later to Korea and Taiwan. These transitions were driven by strategic investments, outsourcing, and technological advancements, leading to a global collaboration in semiconductor production.

Despite China's emergence in the market, the core axis of collaboration remains between Silicon Valley and South Korea/Taiwan. This collaboration encompasses chip design, intellectual property, manufacturing, and various other aspects of the semiconductor supply chain. The industry's growth reflects not only technological progress but also market dynamics, sales, and marketing strategies.

Tech titans like Chang, Moore, and Noyce have played pivotal roles, leaving an enduring legacy that extends beyond silicon wafers to impact everyday lives. Their innovations have structured our past, present, and future, shaping the trajectory of technological progress and societal evolution.



EPS 5: THE RACE TO BEAT THE CANCER DISEASE

Around 20 million people worldwide are diagnosed with cancer every year - a death sentence for 10 Million of them. The outlook is bleak: cancer, currently the second leading cause of death after cardiovascular disease, is on track to become the number one killer. At the current rate, the number of cases and deaths is expected to double by 2040. Furthermore, as countries like India and China continue to develop, the number of cases is likely to rise. This is attributed to the fact that more affluent countries tend to have a higher number of cancer cases.

Researchers worldwide confront a formidable challenge in the global battle against cancer, famously termed the 'king of all diseases' by oncologist Siddharta Mukherjee. As emphasized by Professor Ulrich Keilholz, Director of the Comprehensive Cancer Centre at Berlin Charité, winning this race is imperative—there's no alternative. This episode serves as a guide in this investigation, driven by our collective desire to gauge our progress in combating cancer for the betterment of humanity.

We'll engage with researchers and doctors, particularly those in major university hospitals where research and treatment are intertwined, dedicated to the singular mission of controlling cancer through comprehensive therapeutic approaches.

Over the past decade, significant strides have been made in research and treatment, propelled by the unwavering dedication of these individuals, our true heroes. Through their stories, we'll gain insight into the current state of cancer research and therapies globally and how they are continually refined to save lives.

The researchers and doctors are the focal point of our narrative, deeply involved in the race against cancer and time. Their global exchange of information drives progress in research, therapy, and drug development. We weave together different chapters and settings, incorporating fast-paced storytelling and vibrant imagery of cities like Tokyo, L.A., New York, Shenzhen, and Singapore.

Through drone footage, we highlight pivotal research and treatment centers, university hospitals, and major academic institutions, where the battle against cancer unfolds. Our narrative also spotlights the dedicated individuals working within these facilities.

An essential aspect of our storytelling involves high-quality animations, helping viewers understand complex medical and biological processes in therapies. All factual statements undergo rigorous verification for accuracy from the outset.



EPS 6: THE RACE TOWARDS A NEW GREEN ECONOMY

More than half of the world's population lives in urban areas and this percentage is set to increase to almost 70 per cent by 2050. Large cities' demand for resources such as water, food and energy is a major concern for researchers worldwide in times of climate change. It is the challenge of the century to radically and permanently transform the complex energy systems of urban areas.

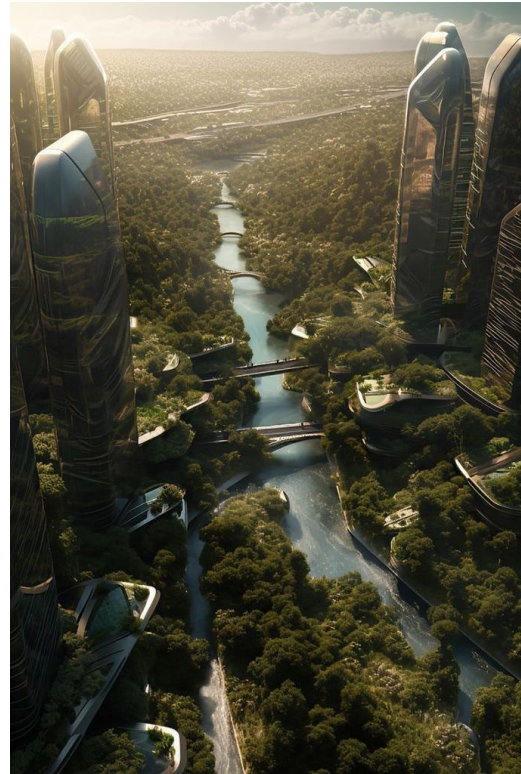
In the race towards a new era of green energy, innovation is the fuel that propels humanity forward. With the pressing need to combat climate change looming, scientists, entrepreneurs and politicians around the world are engaged in an exciting search for sustainable solutions.

State-of-the-art solar panels adorn skyscrapers, harnessing the sun's rays to power entire cities. Offshore wind farms, like modern mechanical forests, dance gracefully in the ocean breeze, generating clean electricity to meet the demands of a growing population. Electric vehicles whizz silently along busy roads, replacing their fossil-fueled counterparts and reducing harmful emissions.

But the green energy race is not just about technological breakthroughs: it is a global movement towards a brighter, more sustainable future. Governments are setting ambitious targets, incentivising the adoption of renewable energy and promoting collaboration between nations. Meanwhile, investors are investing billions in clean energy projects, recognising the immense potential for profit and conservation of the planet.

However, there is no shortage of challenges on this exhilarating journey. From overcoming the intermittency of renewables to modernising obsolete infrastructure, there are obstacles to overcome and overcome. However, each setback only fuels the determination of those leading the charge, igniting creativity and innovation.

Through captivating images and a compelling narrative, this episode highlights the urgency, excitement and hope of this pivotal moment in history. We uncover obstacles, celebrate discoveries and imagine a world where clean and abundant energy fuels progress for generations to come.



EPS 1: MEGACITIES



Ma Yansong (Chinese) - Founder of MAD Architects, Ma is known for his futuristic and nature-inspired designs, like the Absolute Towers in Mississauga, Canada.



Elizabeth Diller (American) - Co-founder of Diller Scofidio + Renfro, known for her groundbreaking architectural projects that blend architecture, art, and technology, including the High Line in New York City and The Broad museum in Los Angeles.

EPS 2: A NEW FOOD SYSTEM

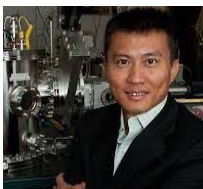


Co-founders of the Finnish Solar Foods, **Dr. Juha-Pekka Pitkänen and Dr. Pasi Vainikka** produce protein powders "Out of Thin Air." Their bioreactors use CO2 from the atmosphere to turn emissions into food via fermentation.



In Arlington, VA, **Dr. Molly Jahn leads DARPA's** efforts to turn air, water and electricity into food. Could microbes, bacteria and fungi produce nutrients in hours or days rather than a season?

EPS 3: THE CORE RAW MATERIAL

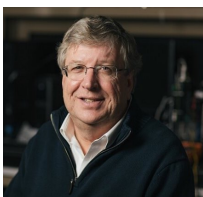


Dr. Yi Cui (Researcher) - Cui is a materials scientist and professor at Stanford University, specializing in nanomaterials for energy storage and conversion, with a focus on developing high-performance batteries and solar cells.



Dr. Barbara Sherwood Lollar (Geologist) - Sherwood Lollar is a geologist at the University of Toronto known for her research on groundwater geochemistry and the exploration of deep Earth processes, providing insights into the availability and extraction of critical materials.

EPS 4: THE MICRO CHIP



Dr. Eric Fossum - Inventor of the CMOS image sensor, a crucial component of modern digital cameras and smartphone cameras. Dr. Fossum's work has significantly impacted the evolution of microchip technology and its applications in imaging devices.



Dr. Diana Franklin - Professor of computer science at the University of Chicago, specializing in computer architecture and microprocessor design. Dr. Franklin's research focuses on novel approaches to microchip design and optimization.

EPS 5: TO BEAT THE CANCER DISEASE



Dr. James Allison - He won the Nobel Prize in Physiology or Medicine in 2018 for his discovery of cancer therapy by inhibition of negative immune regulation.



Dr. Elizabeth Blackburn - A Nobel laureate in Physiology or Medicine for her discovery of telomerase and its role in cancer and aging.

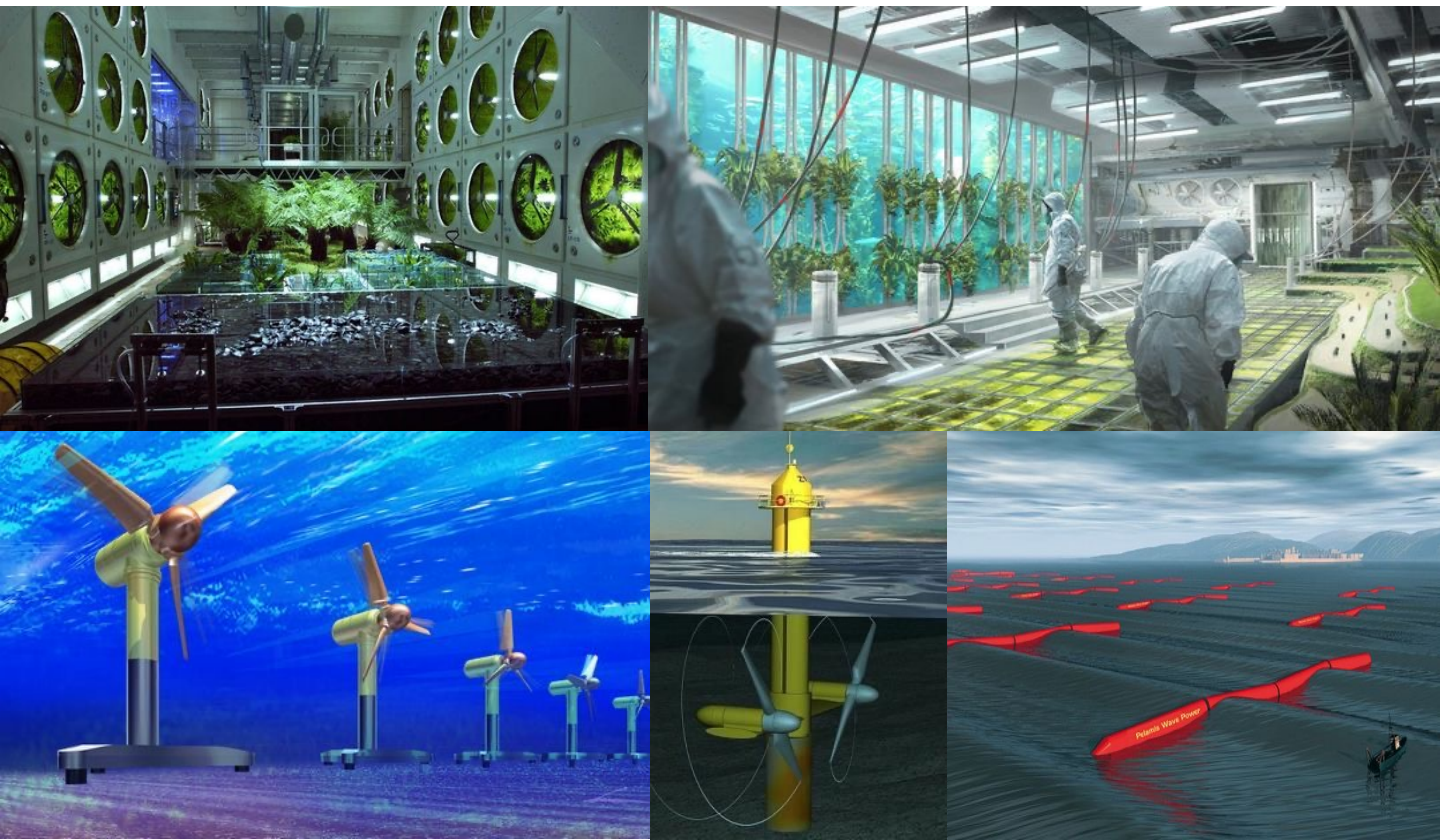
EPS 6: A NEW GREEN ECONOMY



Bill McKibben is an environmentalist, author, and founder of the grassroots climate movement 350. He has been a leading voice in the fight against climate change and has written extensively on the topic.



Dr. Ayana Elizabeth Johnson is a marine biologist, policy expert, and founder of the Urban Ocean Lab. She is a leading advocate for ocean conservation and climate action.



CGI

In a documentary series like **"Race for the Future,"** computer graphics play a crucial role in enhancing storytelling and elucidating complex topics. Through meticulously crafted visuals, viewers are transported into the heart of each subject, gaining a deeper understanding of the challenges and opportunities that lie ahead.

For "Megacities," computer graphics can vividly illustrate the exponential growth and urbanization of these bustling metropolises. From sprawling cityscapes to intricate transportation networks, viewers can witness the dynamic evolution of urban life and the environmental impacts associated with rapid urbanization.

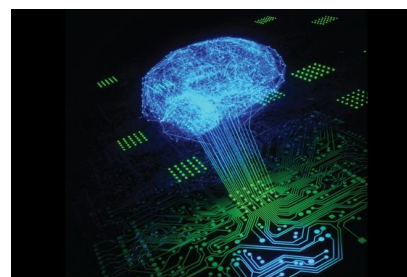
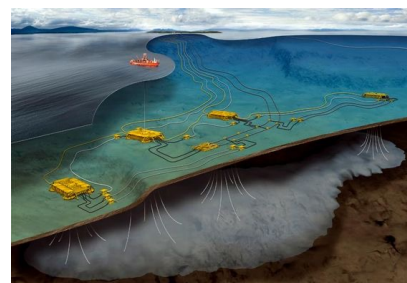
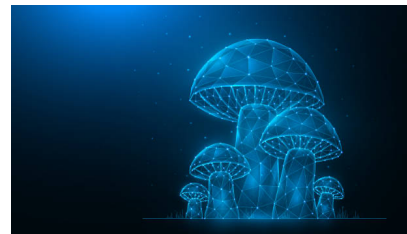
In "New Food," computer graphics can showcase innovative agricultural techniques such as vertical farming and aquaponics. Viewers can see how technology is revolutionizing the way we grow and distribute food, leading to more sustainable and resilient food systems.

For "New Green Economy," computer graphics can visualize the intricate connections between renewable energy sources, sustainable infrastructure, and economic development. From solar and wind farms to green buildings and electric transportation networks, viewers can see how the transition to a green economy is reshaping industries and creating new opportunities for growth.

In "Core Raw Material," computer graphics can depict the extraction and processing of essential resources such as minerals and metals. Viewers can gain insights into the environmental and social impacts of resource extraction, as well as innovative approaches to recycling and sustainable resource management.

In "Microchip," computer graphics can delve into the microscopic world of semiconductor technology. From the fabrication process to the intricate circuitry of microchips, viewers can understand the essential role of microchips in powering our digital world and driving technological innovation.

Finally, in "Defeat the Cancer Disease," computer graphics can illustrate the biology of cancer cells and the mechanisms of cancer treatment. Viewers can visualize concepts such as tumor growth, metastasis, and targeted therapies, gaining a deeper appreciation for the complexities of cancer and the ongoing efforts to find effective treatments and cures.



The RACE FOR FUTURE

THANK YOU ALL FOR YOUR TIME AND ATTENTION
DURING THE PRESENTATION.

YOUR ENGAGEMENT AND THOUGHTFUL QUESTIONS
ARE GREATLY APPRECIATED.

IF YOU HAVE ANY FURTHER INQUIRIES OR REQUIRE
ADDITIONAL INFORMATION, PLEASE DO NOT HESITATE
TO REACH OUT.

YOUR FEEDBACK AND INTEREST ARE INSTRUMENTAL TO
OUR SUCCESS.

CONTACT US

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