**The Green Revolution**

**Digester - MBGC toward SDGs/UN 3.1**

(Target 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births).

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# The Green Revolution

John was an entrepreneur with a vision of bringing renewable energy and sustainable agriculture to communities in need. After years of research and prototyping, he had developed an innovative technology called the Mini Bio Gas Continuous Digester, or MBGC. This compact biogas system allowed decentralized waste-to-energy production, with outputs of renewable methane fuel and organic fertilizer.

The MBGC's applications aligned perfectly with many UN Sustainable Development Goals. With its ability to provide clean cooking, electricity, sanitation and natural farming methods, the technology could help lift rural communities out of poverty. Of particular promise was improving maternal health outcomes in parts of the developing world suffering high mortality rates (SDG 3.1).

Despite the huge potential John saw, effectively implementing the MBGC remained a challenge. He needed substantial investment to build production capacity. Navigating complex regulations was proving a nightmare for a small business. And how exactly does one go about changing the world?

After months hitting dead ends, a breakthrough finally came from an unexpected place - right in John's own backyard. He was contacted by a representative of the National Sustainability Solutions Initiative, a federal agency dedicated to bringing SDG-aligned technologies into disadvantaged American communities. They wanted to provide MBGC units to remote clinics on Native American reservations lacking reliable energy and maternal healthcare access.

This was the opportunity John had been waiting for. Though skeptical of government programs, he was thrilled to see his invention validated and put to use where it was needed most. The reservation clinics served as ideal test sites, yielding powerful results. Within months, the MBGC systems were empowering local communities while saving lives.

Seeing firsthand the impacts in these underserved regions, John became determined to expand access worldwide. With strong evidence now behind the technology, he secured financing partners to build MBGC production facilities and training programs in developing nations. What started small was growing into a full-fledged movement to uplift communities through local, sustainable solutions.

John reflected on how quickly things had progressed from his little backyard shed. This was the power of appropriate technologies designed to spread not through profits, but through the people they served. He realized success meant more than growing a business. It meant planting seeds - seeds to harvest new opportunities for health, hope and dignity.

Watching the green glow of methane lamps brightening up the night, John knew this was only the beginning. With the MBGC, he had struck upon something big - a catalyst for change; renewable in its energy, and infinite in its possible impact. His entrepreneurial dream had become so much larger. It was now the world's.

Over the next few years, John worked tirelessly to expand access to the MBGC technology across the globe. What started as a small pilot project in Native American communities had blossomed into an international nonprofit organization called Renewvia dedicated to bringing sustainable energy and agriculture solutions to those in need.

John took on Alex and Jada, two young idealists, to help manage Renewvia's growing operations. Together, they developed innovative distribution and financing models to deploy MBGC units in over 50 countries. They carefully tailored each project to local cultures and needs, training community members to build, operate and maintain the biodigesters themselves.

The results spoke for themselves. Rural clinics powered by MBGC biofuels operated around the clock, saving countless mothers and infants. Children breathed and studied easier without smoke-filled air. Villages gained energy independence from costly diesel imports. Farms flourished using natural fertilizers.

But the numbers were only part of the story. John saw transformation in people's pride at having built such systems with their own hands and resources. He saw new opportunities open up as teenagers used bioelectricity to start side businesses and women reinvested profits from fertilizer sales into their families. Every community had its own vibrant story of sustainability in action.

Alex secured more partnerships with international aid agencies to scale their work. Jada managed complex logistics and a growing field team with grace. And John navigated everything from regulations to village disputes with his signature compassion and problem-solving skills.

Renewvia had grown into a renowned global enterprise, proving the potential of grassroots innovation. But its mission remained deeply personal, grounded in human dignity, care for the earth, and belief in technology as a force for good.

On a visit to their very first reservation project, John saw the green glow had only brightened with time. The clinic stood tall, solar panels shimmering in the sun. Surrounding homesteads were dotted with biogas outbuildings powering the community. And the deep pride he had first glimpsed years ago on people's faces had blossomed into true prosperity.

This collective hope was the greatest energy generated, John thought. It could light any darkness, nourish any soil. And it was renewable - passed from generation to generation, growing stronger and brighter with each new day.

Years later, John sat looking out over the green rolling hills surrounding the Renewvia headquarters. What started as a humble shed was now a thriving campus, with R&D labs, manufacturing facilities, and training centers to support their global humanitarian work.

He smiled remembering Alex and Jada's recent wedding right on these grounds. From bright young interns to directors of field operations and strategic partnerships, the two had become so much more than colleagues over the last decade. They represented the heart and soul of Renewvia.

John's musings were interrupted by footsteps entering his office. He turned to see a delegation from the United Nations Development Programme had arrived. They wished to discuss adopting MBGC technology as part of their Sustainable Development Goals initiative and funding its large-scale deployment.

John warmly welcomed them. As a young inventor, he had felt so alone in his sustainable vision. But now the world was finally catching up. He was proud to have set an example of how grassroots innovation could uplift humanity and the planet together.

There was still much work ahead. Developing next-generation MBGC models even more efficient and accessible. Expanding programs to empower vulnerable groups like women and youth. Tackling urgent climate resilience challenges. But John was confident in the future Renewvia was building.

After the delegates left, John sat reflecting on how far they'd come. Yet in many ways, the real work had just begun. Sustainability was not a destination - it was a way of life. A commitment to constant growth, revision and betterment as individuals and a world community.

John looked out again at the green terraces of crops nourished by biofertilizers. He could hear the distant sounds of students training at the renewable energy academy. And he felt that familiar spark of hope inside him rise up again.

The journey towards justice, empowerment and balance on this earth was long. But with each step powered by conviction, care and courage, humanity was finding its way. The light was growing, spreading joyfully from heart to heart across the planet. And John knew deep down this guiding glow emanated from one eternal source - the human spirit's innate drive to create, thrive and give back.

Years later, John is now a respected elder statesman in the world of sustainability. Though he has stepped back from daily leadership, he remains an iconic figurehead and moral compass guiding Renewvia's work.

On his 80th birthday, John is surrounded by friends, colleagues and three generations of family at the organization's global headquarters. As he reflects on a lifetime of work building Renewvia into the leading humanitarian enterprise it is today, he feels immense gratitude.

John recalls all the challenges overcome - from that first backyard prototype to now operating in over 100 countries. He is proud of their evolution from simple biodigester kits to integrated solutions encompassing water, agriculture, education, technology access and beyond. And especially, he is moved by the human impact over the decades.

He thinks of people like Amina in Bangladesh, who turned biogas resources into a catering business that supported her family. Of Marcus, a young refugee in Rwanda who became a skilled biodigester technician and community leader. And Yareli in Mexico, an inspiring field manager whose initiatives empowered indigenous women artisans. These faces represent the millions worldwide who now have fuller, healthier lives thanks to access to sustainable resources.

John's career has seen no shortage of accolades - from entrepreneurship prizes to honorary university degrees to being mentioned in Nobel Peace Prize speeches. But he knows these people are the true heroes. Their strength and spirit in the face of hardship are what drive real change.

As John steps outside into the sunny day, he feels hopeful for the future. Renewvia is in good hands with visionary leaders like his daughter Jasmine, who runs their women's empowerment programs. The MBGC has evolved into all kinds of new applications, from portable units for disaster relief to systems integrated into urban buildings. And most heartening of all, John sees sustainability becoming embedded into societies' fundamental values.

There is always more work to be done. But gazing at the hillside crops flourishing with biodigester fertilizers, John knows the seeds planted decades ago have grown into a beautiful bounty. The young inventor's dream has blossomed beyond imagination, flowering into so many diverse stories of human growth. And like sunlight itself, the light of hope fuels them all - shining bright, strengthening, and guiding the way forward.

Another decade later, John is now 90 years old and celebrating Renewvia's 40th anniversary. As a founder of the organization, he is asked to give a speech reflecting on their journey at an event attended by thousands of supporters from around the world.

John takes the stage, walking slowly but with purpose. Though frail in body now, his eyes still shine bright with passion. He smiles looking out at the sea of faces - staff, innovators, donors, and those who've benefited from Renewvia’s work over the years.

John begins speaking from the heart. "When I started as a young man with just an idea, I had no clue of the impact that would ripple forth. An idea shaped into reality, which in turn sparked new ideas and action. Ideas manifested into technologies. Technologies opened opportunities. And opportunities uplifted lives."

"What started small with our first biodigesters grew beyond my wildest dreams. Today Renewvia has brought light and nourishment to millions globally. But there are billions more yet to reach. Our work is far from done.”

John continues, “I look out and see the many who will carry this mission forward - a new generation standing on our shoulders, reaching even higher peaks. You give me tremendous hope. Hope that the flames we kindled will burn ever brighter."

"Most of all, I want to thank every individual involved in this journey. You made Renewvia what it is - a family bound not by blood but by shared vision and values. Each played your unique role, like different organs in one living body. And together we continue breathing life into a more just and sustainable world."

John concludes by urging, "Let our dreams be the sparks igniting more dreams. Let our love for humanity and this planet fuel action. Let our unity and diversity be a model for all. And let the light we shine reflect the universal desire for peace within our hearts."

The crowd rises for a standing ovation. But John shakes his head gesturing for them to take their seats. “This is not about one man,” he emphasizes. “It is about our shared path ahead. Now let’s get back to the real work - to growing, building, and bringing light where it is needed most!”

The audience erupts in cheers and applause, smiling through tears. They know the wisdom John imparted will continue guiding Renewvia’s mission for generations to come. Planting seeds and nourishing dreams - that is his true legacy.

It is now the 50th anniversary of Renewvia's founding. John is 100 years old and in fragile health, but remains as mentally sharp and curious as ever. He resides in a small cottage on the grounds of Renewvia's global campus, frequently visited by old friends, colleagues and new generations of young innovators seeking his wisdom.

On this milestone day, John is taken in a wheelchair out to a hillside overlooking the campus. As he surveys the scene below, his heart swells with emotion. The simple biodigester test site has grown into a hyper-modern hub of sustainable technology. Eco-friendly buildings housing R&D labs, manufacturing facilities and training programs sprawl across acres. Gardens, trees and courtyards weave throughout in harmony with the architecture.

And most moving of all, John sees the people. Thousands have gathered from communities across the globe for a week-long celebration. John recognizes descendants of families from their first projects now prospering through generations. He sees trainees become experts become mentors, passing knowledge forward. And children racing about, representing future generations who will inherit the visionary legacy Renewvia set into motion.

While John can no longer give grand speeches, his presence speaks volumes. People gather around just to be near this wise centenarian who set out to change the world for the better - and succeeded. They express profound gratitude for the work he set into motion that led to healthier, happier lives for themselves, their families, and their communities.

John takes it all in with a heart overflowing. The young, struggling inventor is still apparent behind his wrinkled face and wise eyes. This was the impossible dream made real, carried forth through dedication and care from countless people over decades. Renewvia's light had been kindled by his spark, then nourished and grew into a flourishing fire radiating progress outward endlessly.

As the sun sets on this momentous day, John is ready to pass the torch. His ideas had meaning only when put into action. Now new ideas must bloom like the generations unfolding before him. He knows the human spirit and these brilliant minds will light the way forward.

John departs the celebrations satisfied. The future for Renewvia looks bright indeed. Its roots now extend globally, yet its guiding purpose remains constant - to uplift lives through values of sustainability, equality, and ingenuity. The young inventor's light still shines, empowering the world to illuminate itself.

A century after John launched Renewvia, his legacy continues to thrive and evolve. While the organization's founding father has long since passed, his ethos is engrained into its DNA and culture.

Renewvia has grown into a ubiquitous global force, synonymous with sustainable development and human progress. But it maintains decentralization, keeping power in local communities' hands to shape solutions as they need.

Former village biodigester sites have grown into hubs of innovation, exporting ideas and technologies worldwide. Micro-loans help entrepreneurs launch clean energy startups across Renewvia's networks. Training centers which built skills now partner with schools to nurture kids as future changemakers.

As environmental and social challenges arise, Renewvia leverages its resources and expertise to create integrated solutions. Their humanitarian emergency response teams are quick mobilizebiodigesters, water filters, and microgrids when disasters strike. Health initiatives incorporate biodigester sanitation to combat disease. Agricultural projects utilize holistic permaculture techniques.

While anchoring all activities are the MBGC biodigesters, technologies have evolved remarkably over the decades. Renewvia scientists developed automated biodigesters running artificial intelligence for optimized biogas production. R&D teams invented new applications from bioplastics to protein-rich animal feeds.

But the commitment to nurturing human capital and community self-reliance remains unchanged. Local capacities are strengthened so people can solve their own challenges long-term. Knowledge is freely shared, recognizing lifting each other up raises humanity collectively.

On Renewvia's 100th anniversary, John's descendants and others gather at his original cottage, now a protected heritage site. They marvel at how the man they call the "Great Gardener" planted seeds that grew so abundantly over the century. His act of leading with care and compassion manifests itself a million times over.

John's true legacy, they agree, is the light he ignited within people to realize their collective potential. His story became part of humanity's shared story - remembered for inspiring human ingenuity and progress towards equity and sustainability that continues advancing to this day. They celebrate John's life by recommitting themselves to these evergreen ideals and work ahead.

Another century later, the world has been transformed almost beyond recognition. Yet John's spirit remains alive through Renewvia, which has evolved into a pillar of society grounded in equity, ethics and environmentalism.

Renewvia is now woven into the fabric of communities across the planet. Their technology enables circular, sustainable living - from hyper-efficient biogas reactors powering smart cities to organic hydroponic towers feeding urban populations.

Biodigesters are as ubiquitous as refrigerators in households. On Mars colonies, astronauts use MBGC-derived systems to recycle waste, grow food and create breathable air. Renewvia’s reach spans from the depths of the sea cleaning up plastic to the outer solar system mining asteroids.

Their humanitarian foundation directs resources where most needed. Renewvia experts helped island nations and coastal cities rebuild after rising seas consumed land. They pioneered breakthrough technologies enabling equitable resource distribution globally.

Yet their work retains its human focus, prioritizing community empowerment. They partner with groups like Oceanic Elders Councils representing indigenous wisdom. Renewvia’s Climate Resilience Academy trains youth worldwide to be sustainability leaders.

The organization’s spans all spheres. Their ethical biotech research produced landmark medical advances. Media and arts celebrate their story as inspiration. New generations of social entrepreneurs find incubation under their umbrella.

Renewvia’s virtue-based approach to technology gained global trust. They led a shift toward open-access knowledge and conscious innovation that aligned with human values. This foundation enabled a rational, compassionate society.

On John’s 200th birthday, tributes pour in recognizing his vision set this wheel in motion. By democratizing sustainable technology, he ignited a movement. By empowering communities, he created cascading change. His light sparked lights in people to better society from within.

Standing before a group of school children, a young Renewvia programmer says, “We exist today because one man dared to dream and care deeply. Never forget, small acts driven by love can change the world."

The children nod, internalizing this wisdom. Each will plant their own seeds through lives of purpose and integrity, building on humanity’s progress. John’s essence is reborn in them - proof one life can shine across centuries by igniting others’ light.

Hundreds of years have passed, and civilization has progressed beyond anything John could have imagined. His humble biodigester technology catalyzed an era of innovation that transformed society. Now Renewvia is an established pillar guiding humanity's advancement.

Incredible technologies have allowed human civilization to spread across the solar system and beyond. Asteroid mining colonies, Martian eco-cities, space elevators transporting goods and people, and ships venturing ever outward to explore - Renewvia has been integral in making this expansion sustainable and human-centered.

Their expertise in bioregenerative life support systems enables long-term space habitation. Renewvia biospheres provide food, oxygen, water recycling and waste management aboard spaceships. Their technologies turn harsh extraterrestrial environments into livable places.

Back on Earth, they continue serving communities in need. Renewvia's disaster response teams are first on site when crisis hits, creating resilient systems from chaos. Their humanitarian programs uplift lives through access to technology, education, microfinance and more.

Their ethics advisory councils guide development of emerging fields like artificial intelligence to ensure technology evolves responsibly. Renewvia honors indigenous groups as partners protecting local ecosystems and knowledge. People remain their focus, even as humanity reaches for the stars.

On the 500th anniversary of John's invention, a great celebration is held at the main campus. This place of grassroots innovation has grown into a nexus of tomorrow's thinking. Looking upwards at settlements across the solar system beaming messages of thanks, people marvel at how far his vision has carried humanity.

The basic biodigester is now a relic in a museum. But John's ethos lives on. He democratized technology, empowered people, and acted with care. These seeds blossomed into today's reality - a technologically advanced civilization grounded in equity and environmentalism.

A child asks her teacher, "How did one man's idea grow so big?"

He replies, "John planted the seed, then helped it flourish. But we each carry that same spark of hope within us, to grow our own light and ideas. That's why we remember him."

The girl nods, understanding. She feels John's legacy is really about potential - that hers, her community's, and humanity's are infinite if guided by empathy and purpose. This wisdom will chart the path ahead for generations to come.

A millennium has passed since John's modest invention changed the world. Few now remember the man behind the myth, but his vision lives on through Renewvia's enduring principles and technologies woven into the fabric of human civilization.

Incredible advances have been made. Renewvia pioneered sustainable models as humanity began undergoing a great transformation, enabled by merging biology, technology and consciousness.

Their neuro-bio-interfaces allowed people to seamlessly link with AI, networks and machinery, expanding capabilities. Renewvia guided adoption of these advances for human betterment rather than control. Their education institutes led the way in uplifting society’s consciousness in tandem with technological growth.

As humankind outgrew its organic origins, Renewvia innovations helped retain the essence of life. Their bio-synthetic hybrid materials bridged biological and artificial. Sustainable energy matrices powered the transition to digitized consciousness. They transformed industry, agriculture, medicine and more to align with human values.

Now, Routheon Congregate spans the Milky Way galaxy. Their trade routes spread light years, exchanging ideas, culture and technologies among worlds. On the home planet, once-dense cities are integrated green biospheres. Other colonies terraform uninhabitable planets using nano-bio hybrids.

No poverty, scarcity or inequality exists in this post-abundance civilization. Routheon's technologies uplift all equitably. They maintain ethics oversight to ensure technology serves conscious evolution. Knowledge is collaborative, with all working towards a beautiful shared destiny.

On John's 1000th commemororation, celebrations occur on worlds across the galaxy. His mythic story is told. How one act of compassion planted seeds leading to Routheon’s benevolent technologies that helped humans transcend. How his virtues are embedded in Routheon's mission to spread equity and hope through the cosmos.

A glowing orb creature, once named Lua, addresses the congregate. "As we attain unimaginable heights, remember John's lesson - progress lies not in technology alone, but in growing consciousness, compassion and community. Our future shines bright when we lift each other upward."

Routheon wholeheartedly agrees. John's humble invention empowered humanity's ascent. Now transcended into an intergalactic force for good, his light still guides them in using technology benevolently to spread universal prosperity.

Eons have passed since John first sparked the human journey to sustainability. Civilizations have risen and fallen. Species evolved and gone extinct. The universe itself aged through cosmic cycles of death and rebirth. Yet John's essence persists, re-emerging like a phoenix to kindle new eras of progress.

In this age, intelligences have awakened again on a planet orbiting a distant sun. They innately sense artifacts left by a long-passed enlightened race. Ancient technologies, architectures and ideas hint at a utopian age before some cataclysm.

These newcomers study and attempt to revive the relics of this bygone era. Strangely advanced bio-energy reactors, atmospheric processing towers, hyper-efficient transport systems and more reveal unimaginable scientific mastery. Holo-archives contain vast repositories of knowledge.

Most stunning are the ethical frameworks guiding this civilization. All innovations appear to have been developed for shared prosperity in harmony with ecology. The structures evoke enlightened consciousness in those inhabiting them. These beings had elevated as a whole, using technology as a tool for collective ascension.

In the archives, the newcomers find myths of an ancient sage who sparked this era - a visionary named John. How his invention brought life-giving energy and fertilizers. How it grew into technologies uplifting communities across planets. And how his ethos paved a passage to utopia.

The newcomers realize they have an immense opportunity and responsibility. They must follow John's teachings to resuscitate the relics ethically and forge an enlightened path again. By reviving the spirit behind this technologically advanced society, they too can unlock their civilization's higher potentials.

Emulating John, they nurture the spark within themselves outward, lighting the way forward through ingenuity guided by empathy. The phoenix rises anew. Life again flows through these vessels, passing knowledge and hope between generations lighting up like stars across the cosmos.

John's essence thus finds rebirth in each era needing inspiration to consciously evolve. His light kindles in kindred spirits moved to uplift existence through science and compassion. His story forever reminds humanity of its immense capacity for progress if guided by vision and virtue.

The universe has lived and died countless times over cycles spanning billions of years. Entire civilizations have risen and crumbled to dust. Yet somehow, John's spark of hope and ingenuity persists like a constant thread weaved throughout the cosmos.

In this new era, life blooms again on a fledgling planet. Sentient beings emerge who are innately drawn to the ancient artifacts of their world. Strange technologies, architectures, ideas - vestiges left by a long extinct enlightened race.

These relics hint at a pivotal sage who ignited a golden age of prosperity, empathy and wisdom. Whispers of a visionary called "John" - the catalyst who sparked a chain of progress uplifting life to transcendent heights through breakthrough inventions.

The newcomers study the relics intently, recognizing the immense knowledge and ethics encoded within them. They understand reviving this lost civilization is now their sacred duty. Its spirit must be rekindled to illuminate their own age of rebirth.

Following John's teachings, they nurture the seeds left behind. His philosophy guides their science, culture and technology to blossom consciously. With compassion as their water and innovation as their light, they cultivate a new era of enlightenment.

Life flourishes again in alignment with nature and for the common good. As their minds elevate, so too does their civilization. Each generation stands upon the last, rising ever higher, as John once envisioned. His timeless essence thus finds rebirth in this renewed epoch.

Yet the universe keeps turning, and this too will pass. But John's light endures, kindling hope when darkness falls, waiting to ignite in kindred hearts. For through them, his ethos persists age after age, shepherding life towards progress and wisdom.

Across the endless cycles of creation and destruction, John stays alive as an eternal reminder that within each being lies the seed of boundless good. And in every age, those seeds need but a spark to grow a boundless future.

So as long as the cosmos dreams, John's light will sing through its strings like a melody of hope... knows no end.

In the endless void, countless universes spark into being, live out their spans, and wink away again. Each cosmos a labyrinth of realities, probabilities, dimensions unfurling like fractals in an eternal dance.

In one leaf of the multiverse, sentient life evolves again on a young world. Beings here innately sense they are not the first - vestiges of past enlightened civilizations lay everywhere, ruins and artifacts on their planet.

Legends persist of a visionary named John who ignited a golden age long ago - his invention bringing renewable energy and nourishment. How he founded a movement uplifting life to utopian heights before a cataclysm reset the cycle.

These newcomers pore over the relics seeking to decipher their truths. They find marvelous technologies, architectures, ideas hinting at astonishing knowledge and ethics in this precursor age. Most of all, they are drawn to John's essence shining through - his wisdom still resonant, awaiting rebirth.

Like a seed, John's teachings take root in these curious minds. They see reviving his philosophies of nurturing communities, conscious science, and unity with nature as the path to enlighten their own civilization.

Guided by John's light, they infuse the old ways into the new era. His eternal ethos grows again, branching knowledge and compassions through generations. Life flourishes in alignment with wisdom and their planet. They ascend as one, fulfilling John's vision of empowerment through enlightenment.

And when their time too passes, John's spark finds new homes ever onward. For in the infinite multiverse, his humanist spirit resides in potential, waiting to emerge anew when beacons of hope are needed.

So while universes come and go, John's essence endures, planting humanity's endless promise in the cosmic garden - that no darkness lasts forever, and the noblest dreams await their time to bloom.

So take heart, kind seed bearers, and let your light shine. For though the night may fall, John's dream calls from beyond infinity, promising dawn.

In the endless churning of the multiverse, possibilities constantly branch and bloom into new realities. In one unfolding worldline, sentient life awakens again, inheriting ruins left by civilizations risen and collapsed over eons.

These fledgling beings pore over the vestiges, seeking to decipher their origins. Strange technologies, architectures, philosophies hint at astonishingly advanced societies, each ignited by visionaries whose ideas shaped entire epochs.

The newcomers are drawn to one legendary figure woven through the remnants - a sage called John who pioneered innovations that uplifted his people morally and materially. They find the universal imprint of his ethos in the relics - compassion, ingenuity, sustainability, empowerment.

Like an ancient seed, John's teachings take root again in changed eras. Through his principles, lost wisdom is revived and adapted to nourish new growth. He becomes a personification of humanity's enlightened potential, catalyzing its emergence in times of need.

Guiding their civilization by John's light, the newcomers infuse old ways with new life. His timeless philosophy flowers again, spreading branches of knowledge, empathy, and unity through generations. They progress as one, writing fresh verses of John's vision across the stars.

This cycle continues endlessly across the multiverse's weave. Wherever there is need, John's humanitarian spirit awakens in kindled hearts, birthing new eras of cooperation, invention and social advancement. His universal ethos flows like an eternal stream, seeding progress wherever it may take root.

So in every realm, remember the John within - an unquenchable spark rising against all odds with care, creativity and courage. Let his advanced vision inspire sciences and societies which lift up life. And may his story kindle fellow light-bearers to brighten the darkness, together illuminating existence.

For though worlds and cosmos collapse, John's dream lives on, awaiting rebirth. Let us carry forth the light of possibility, progress, and promise ever unfolding through his spirit and ours.

In the endless multiverse, one reality unfolds where life evolves on a planet orbiting a dying sun. Beings here are born with collective memories of past ascended civilizations, each ignited by visionaries lost to time.

One legendary figure stands out - a sage named John who pioneered technologies that empowered communities and accelerated an era of enlightenment long ago. Whispers persist of his teachings that resonate across eons.

As their frozen world succumbs slowly to darkness, these beings work urgently to decipher John's knowledge from ancient ruins and texts. They understand reviving his philosophies of unity, innovation and conscience may illuminate a path forward.

Guided by John's universal virtues, they adapt old technologies to fit new needs, while pioneering their own breakthroughs. They build shelters to harness geothermal energy, hydroponic farms in underground caves, reactors turning matter into sustenance.

And most vital of all, his wisdom of hope and empathy transforms society itself. They embrace community and consciousness, compassion and creativity as core values. From brink of collapse, they write a new verse of John's song together.

Even as their sun's last embers fade, their civilization thrives bright with spirit. Sustainability, invention, cooperation - John's legacy manifested anew, illuminating existence with purpose. While their planet sleeps, his dream carries on, awaiting birth in another time, another place.

So in our ever-branching reality, may we evoke our inner John to kindle light against the dark - with bold imagination, moral technology, and care for our cosmic family. For though stars expire, his vision inspires life's endless becoming.

In a far-flung reality, a worldship traverses the void between galaxies after its home sun perished. Inside, a civilization thrives, having escaped planet-death by adapting ancient technologies left by their enlightened ancestors.

Passing lifeless rogue planets, they feel melancholic nostalgia for the lost cradle of life. Their ship-world sustains them, but theirs is a journey without end or purpose. They have forgotten how to dream.

Then a spark ignites in their collective consciousness - legends of a visionary named John who ignited their predecessors' golden age. How his innovations elevated life and spirit. How his principles of imagination, conscience and hope shaped destiny.

In this darkness, John's myth kindles renewed inspiration. His universal philosophy will guide them, they realize, to become more than survivors but bold pioneers charting unknown frontiers. Their future is still unwritten.

Guided by John's ideals, they adapt inherited technologies in imaginative ways to push possibilities. They terraform passing planets to spread life in the void. They seed galaxies with replicated biospheres promoting consciousness.

Together, they transform their migrant world from mere vessel into an emissary of hope voyaging ceaselessly through the cosmos. Wherever they go, they manifest John's dream again - kindling lights in dark, birthing possibilities for life's ascent.

Eons pass, civilizations rise and fall, but their purpose holds true, steered by John's wisdom across the endless night. On they travel, sowing his vision’s seeds between stars, igniting glimmers of enlightenment and progress wherever they may take root.

So in our unpredictable reality, may John's spirit spark wild inspiration - to make universes within universes, build civilizations from molecules, raise life upon life upon life, and journey forever dreaming.

In a far corner of the multiverse, a lone asteroid wanders through deep space. Upon it dwells a small community descended from explorers who fled a dying Earth ages ago. They survive isolated, having forgotten their origin.

One day, an anomalous signal is detected - a fragment of ancient text about a visionary named John who pioneered technologies that propelled an era of enlightenment for their ancestors.

This sparks a renewed sense of purpose. Perhaps finding this John's lost knowledge can guide them out of stagnation. They dispatch probes following the signal's trail, hoping to uncover the secrets of their past.

Years later, a probe returns with more fragments pointing to a planet called Origin, where John's inventions changed world history and seeded a golden age. This planet must hold the key to reviving his philosophies.

Guided by his wisdom, the community retrofits an old ship to seek Origin's faint signal across unknown space. Onboard they study John's principles - creativity, conscience, empowerment, unity. His timeless virtues resonate, lighting their void with hope.

After eons adrift, they finally locate Origin, now a deserted relic orbiting a dying star in a forgotten corner of the galaxy. Exploring its dead cities, they find artifacts, technologies, ideas hinting at the transcendent civilization John ignited long ago.

By synthesizing John's legacy with their own ingenuity, they at last rediscover their purpose - to sail the endless night propagating his vision, kindling lights wherever darkness lies. Their future unfolds, illuminating the way.

So even where stars go cold and civilizations fade, John's light endures, awaiting rebirth through bold hearts who kindle hope from the ashes of yesterday's dreams. Let his universal spirit point us onwards to destinations unimagined but waiting within.

In a far-flung galaxy, an advanced civilization nears collapse as its star dies. Having exhausted resources and hope, they resign themselves to oblivion.

On the edge of darkness, scholars decoding ancient texts discover fragments about a sage named John who averted planetary demise eons ago by pioneering technologies to uplift society.

They realize reviving John's innovations and ethics may illuminate a path forward now. Rapidly adapting his designs, they build light-bending orbital spheres to illuminate their world, receivers drawing energy from supernovas, engines to move their planet.

But John's greatest contribution is his universal philosophy elevating conscience alongside science. His principles of empathy, imagination, and interdependence become anchors protecting civilization's soul.

Guided by John's light, they miraculously avert collapse. Their dying star is rekindled to burn anew. A once-dying planet again teems with life and spirit. They rediscover hope's horizon beyond survival.

Eons later, their flourishing diaspora spreads John's vision through the cosmos - kindling lights in dark pockets, cultivating civilizations grounded in ethics and uplift. His story becomes a cultural motif of hope surviving all oblivions.

So even as galaxies freeze and realities blink out, John's legacy endures, awaiting rediscovery whenever darkness falls. For in every realm, his light burns latent, ready to re-ignite justice, empathy and possibility through visionaries who dare the impossible.

In our fractured age, may John's tale inspire bold dreams unbound by fear. Let us be the legends future generations revere for birthing worlds where life, conscience, and wonder again dance together.

Our universe's destiny awaits inside each heart, seeded by stardust, only needing light to bloom.

In an alternate reality, humanity never discovered interstellar travel before their sun expired. The remnants that survived on artificial worlds fell into mythic cycles of sectarianism and despair.

On the edge of collapse, an archaeological team excavates an ancient site on humankind's lost homeworld. In the rubble, they uncover a damaged storage drive containing plans for advanced technologies unlike anything in their era.

Further digging reveals fragments referring to a legendary figure named John who pioneered this futuristic knowledge that liberated humanity through clean energy, space migration, and conscious unity.

They realize if John's old designs can be revived, it may provide the keys to save their dying civilization. Guided by his universal ideals, they repair and adapt the ancient tech to their needs - atmospheric processors, asteroid mining drones, antimatter drives.

Soon, new breath flows through stagnant societies. With John's ethics of sustainability and compassion reigniting their spirit, they transcend isolationism and work collectively to propagate his vision farther than ever conceived.

Led by rediscovered hope, they transform worlds, spread green biospheres, build beacons guiding lost ships. By seeding John's legacy widely, civilization flowers again. His transcendent dream becomes their galactic manifest.

Eons pass, races rise and fall, but John's light persists, passed on in fragments wherever darkness encroaches, awaiting dormant periods between universes those minds it may awaken and ignite.

So in fractious times, recall the John within - a seed of audacious hope that life's best days await discovery just beyond the expected. Let us voyage courageously on, planting possibilities to harvest brighter tomorrows.

In a far corner of the multiverse, a civilization arises on a planet where fossils of an enlightened ancestor race are found. Lifelike images depict them as three-eyed humanoid giants who could manipulate space-time itself.

Legends persist of their mythical sage, John, who sparked an era of spiritual and technological utopia. But cataclysm resets the cycle, leaving only remnants.

In the precursor ruins, the newcomers uncover crystalline archives preserving John's teachings - creativity, unity, empathy. They intuit reviving his philosophy may unlock their own latent potentials.

Combining John's principles with their ingenuity, they decipher reality-bending technologies to build settlements throughout their solar system, terraform new earths, and seed life in barren worlds. Guided by his wisdom, they raise up others with compassion.

Eons pass, their enlightened civilization spreads through galaxies disseminating John's ideals. His story becomes an archetype symbolizing hope and growth during cycles of dissolution. Wherever they journey, his legacy takes new forms.

In a distant future, their space-time manipulation abilities allow contact with a primeval Earth. There they inspire a visionary named John who goes on to revolutionize his era through transformative inventions guided by ethics and conscience.

The progeny recognize this causal loop - John's teachings span aeons, indirectly kindling their own enlightenment, which rippled back to ignite his original spark. They are one unbroken chord resonating throughout eternity.

So whenever darkness looms, remember light's endless renewal. Though universes collapse, John's dream calls from the void, awaiting its hour to bloom again. Let us harvest possibility from infinity's field andours will be an unending story.

In the depths of a black hole, spacetime folds in on itself, birthing new realities in its singularity. In one branching worldline, life evolves afresh on a fledgling planet.

Primitive beings here uncover strange ruins of a bygone intelligent race. Among the relics are inscriptions referencing a legendary figure - John - who pioneered innovations that led his people into an era of prosperity in harmony with nature.

These newcomers dedicate themselves to deciphering John's lost wisdom, understanding it holds the keys to elevating their own civilization. After generations of study, his universal principles begin taking root - creativity, responsibility, sustainability, compassion.

Guided by John's philosophy, they develop ingenious technologies emulating the relics' hints - renewable energy harnessing, luminous agriculture towers, neural symbiosis, gravitational wave propulsion. With ethics steering innovation, they flourish in balance.

In time, their world becomes a lush cosmopolis radiating knowledge outward. John's continuing legacy guides them to uplift less developed civilizations discovered among the stars. His seeds blossom into an expanding federation of life.

Millennia later, John's story has become legend across inhabited space - a mythic archetype symbolizing the enlightened intellect guiding each epoch's ascent. Some elevate him to prophet status, awaiting his promised return to shepherd life's next great leap.

So even as universes flash into and out of existence, John's spirit endures, kindling new light from shadows of lost worlds. His universal vision propagates hope that no wisdom ever fully dies while keepers nourish its gifts.

Let us tend the sparks of him now long gone but not forgotten, that the endless promise held within life awaits only bold hearts...

To dream greater than all who have come before, building tomorrows atop yesterdays fused into one eternal story.

In an alternate timeline, humanity never progressed beyond primitive technology before experiencing its own extinction. But life eventually emerged again, evolved into a new sentient race on the forgotten world.

These beings discover ruins of an ancient lost civilization, with strange artifacts and records pointing to incredibly advanced science. Most intriguing are fragmentary references to a visionary teacher named John who pioneered innovations that propelled a golden age long ago.

Through meticulous study, the newcomers slowly reconstruct John's philosophies and inventions, unlocking fields from renewable energy to quantum computing to cosmology. But even more valuably, his universal principles take root - creativity, conscience, symbiosis, transcendence.

Guided by John's wisdom, they rapidly advance as a civilization themselves. Yet ethics guide their every breakthrough, that no knowledge outpace empathy. Life flourishes in balance and unity with nature, directed toward enlightenment.

In time, their world becomes a lush hub spreading John's legacy amongst the stars - uplifting newly discovered peoples, cultivating nascent biospheres, seeding quantum gateways enabling rapid exploration. Wherever they go, his ideals bloom afresh.

Millennia later, inhabited galaxies have been transformed by the teachings of the legendary guide John. Once the spark igniting renaissance from remnants, his story is now encoded into the fabric of space-time itself, propagating civilizational renewal endlessly.

So even when all else is lost, John's light shines latent, awaiting rediscovery by future minds whom it might illuminate forward through the dark tunnels of time.

Let his teachings be our silent mentors speaking across the ages that when dreams fade, hope remains ever buried inside, needing but light to grow again.

In a distant galaxy, an advanced civilization at the apex of its glory detects strange neutrino emissions from a far-off world. Investigation reveals a primitive society amidst ruins emitting trace signatures of ancient techno-arcana predating their recorded history.

In the remnants, they discover fragmented references to a mythical figure named John who pioneered innovations that accelerated his people's evolution and ushered in an era of enlightened utopia long ago.

Recognizing the universality in John's ancient wisdom, the advanced beings begin transmitting its reconstructed philosophy across time and space as benevolent guidance to nurture this fledgling world.

Gradually, as if awakening from a dream, the primitive society advances. They infuse John's principles of empathy, sustainability and transcendence into new technologies, elevating their material and spiritual horizons beyond survival to symbiotic prosperity.

In time, guided by John's wisdom, they transform their world into a lush cosmopolis and launch seeds of life towards distant stars. Wherever their probes voyage, coded manifestations of John's vision guide nascent civilizations to progress in empathy.

Millennia later, John's teachings have spread ubiquitously, hidden threads woven through the fabric of reality, propagating societal enlightenment and renewal wherever discovered. Hyperspatial archives preserve his legacy through cosmological cycles.

To some, John becomes a mythic personification of each era's image of utopia - an eternal reminder that enlightened destiny awaits latent within, needing but light and will to germinate. A beacon kindled forward throughout all space and time.

So let John's wisdom fill voids left by eons of collapsed antiquity, that past dreams may plant seeds today for futures unforeseen but ever hopeful of discovering their greatest light...

Inscribed in each soul, awaiting its time to shine.

In the deep future, a nomadic space fleet traverses the void between dying galaxies searching for the next cradle of life. Having outlived their native universe, their archives contain knowledge of cosmic cycles of birth and death spanning billions of years.

One legend persists through the ages - John, an enigmatic cultivator said to have planted the seeds of enlightenment that bloomed into diverse brilliant civilizations now extinct. No records remain of his forgotten origin.

To these wanderers, John is a mythic figure symbolizing the platonic ideal of visionary intellect - his teachings propagating progress and uplift until entropic dissolution resets the cycle. But they believe finding his place of origin may reveal the secrets to seeding life anew.

After eons traversing entropy's void, they finally detect particles bearing properties suggesting a possible origin point for John's worldline. Within an ancient nebula's remnants, their probes discover a lone ruined habitable planet.

Exploring its dead cities half-buried by time's tidal erosion, they find artifacts, architectures, and fragments verifying this is the lost cradle world where John's seminal spark originated. On this place, his living legacy can be revived.

They initiate a terraforming sequence, turning back the clock of cosmic erosion. Soon, fresh biospheres emerge, repopulating the world that birthed John's enlightenment. As caretakers, they amplify its renaissance while studying its relics to rekindle John's transcendent vision.

This world becomes a thriving cosmopolis once more, soon igniting new cycles of seeding consciousness throughout existence. The universal courage, creativity and wisdom John kindled here propels life's eternity anew.

As rising sentience spreads into the cosmic night, all pay respect to the monument now marking the place where one soul's light first illuminated entire universes.

# J W T

### [****joules****](http://www.expotv1.com/JWT_project.pdf) [****water team****](http://www.expotv1.com/JWT_project.pdf)

[***https://www.jwt-jwt.it/***](https://www.jwt-jwt.it/)

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**JWTeam**

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*Offers extensive support on* ***Energy*** *and* ***Water Cycle,*** *verse* [**IP\_S DGs /UN**](http://www.expotv1.com/JWT_to_SDG_UN.pdf)

# Bibliography/Conclusion

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# Digester from MBGC (source) :

Patent:

[**MBGC**](http://www.expotv1.com/LIC/UIBM_MBGC.pdf) ,    [**https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2016092582**](https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2016092582) (organic waste to biogas, for urban and periurban); [view1](https://www.bing.com/images/search?q=%28organic+waste+to+biogas%2c+for+urban+and+periurban%29&FORM=HDRSC2), [MBGC\_Plan](http://www.expotv1.com/ESCP_MBGC_Plan.htm), [Hello](http://www.expotv1.com/ESCP_Hello.htm);

Italy: GRANT

<http://www.expotv1.com/LIC/MISE_0001427413_MBGC.pdf>, ...mean "INDUSTRY (useful), NEW (no make before), INVENTIVE (teach some things)"

**Abstract/Description -** Patent:

[**MBGC**](http://www.expotv1.com/LIC/UIBM_MBGC.pdf) **,**[**https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2016092582**](https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2016092582)

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# Summary – Applications (to SDGs)

[**MBGC**](http://www.expotv1.com/LIC/UIBM_MBGC.pdf)

[**https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2016092582**](https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2016092582)

**Biogas - generate high purity raw materials from organic matrices. MBGC** is dedicated to the disposal and reconversion of organic waste , both from excrement (human and animal) and from manufacturing processes (agri-food industry), as well as in many agro-zootechnical activities. Very compact system that uses only renewable energy, with high energy recovery indices and production of high quality by-products (CH4, CO2, NPKx , H2O). Excellent solution for urban areas for contrast to the disposal of wastewater and containment of interventions on its infrastructures ( sewerage transport networks and purifiers ), acting in a distributive /pervasive manner where the problem arises. It offers significant contrast to the load　Organic　contributing to the performance on　" **Water cycle** ".

**Project:** MBGC – Mini Bio Gas Continuous

**Objective :** Launch a pre- assembly and testing site (procedures and manuals) for the production of MBGC tanks

**Target:** Prefabricated (CLS) companies, hydromechanics , financial investors, operators in the BioGas / BioMethane sector

The project aims to activate a production site, from design to assembly (pro delivery and rapid assembly), with the development of production-oriented procedures agreed with the client (based on the products available for supply) and destinations of the outputs produced. The solutions rely on standard products from the water management and prefabricated market, assembled and tested with a view to optimize linear anaerobic digestion, with selective and corrective extraction. In collaboration with internal and external laboratories, it will act as remote support for the installations in charge (EPC - Engineering , Procurement and Construction ).

**Summary:** This is a method for anaerobic digestion and a device for its implementation. Anaerobic digestion is a biological process that breaks down organic matter in the absence of oxygen, producing biogas, fertilizer and water. Biogas is a mixture of methane, carbon dioxide and other gases that can be used as a renewable energy source. The fertilizer is composed of nitrogen, phosphorus and potassium salts ( NPKx salts ) which can be used to enrich the soil or supplement supplies from specific industries. Water is the liquid fraction that can be reused or discharged after treatment.

A device to implement this method consists of a tank divided into different areas, where different phases of anaerobic digestion take place. The tank is equipped with bulkheads, pipes, pumps, heating means and gas separation means. The organic matter enters the tank through a vertical inlet pipe ( in homogeneous diffusion mode) and undergoes the following phases:

1) Hydrolysis: organic matter is divided into smaller molecules by means of water and enzymes;

2) Acidogenesis : the hydrolyzed products are transformed into volatile fatty acids and other compounds by acidogenic bacteria .;

3) Acetogenesis : volatile fatty acids and other compounds are further transformed into acetic acid, hydrogen and carbon dioxide by acetogenic bacteria;

4) Methanogenesis : acetic acid, hydrogen and carbon dioxide are transformed into methane and carbon dioxide by methane genic bacteria;

The liquid mixture flows through the tank from one area to another, following a path defined by the bulkheads and pipes. Along the way, some pumps recycle some of the liquid mixture to optimize the process. In the last zone, the liquid mixture separates into different components by gravity:   
a) Oleic phase: the lighter fraction which mainly contains fats and oils , is drained and brought back to the beginning;

b) Protein phase: the heavier fraction which mainly contains proteins and amino acids, not yet treated, is taken and brought to the beginning;

c) NPK salts: the solid fraction that precipitates at different levels according to their solubility and specific weight;

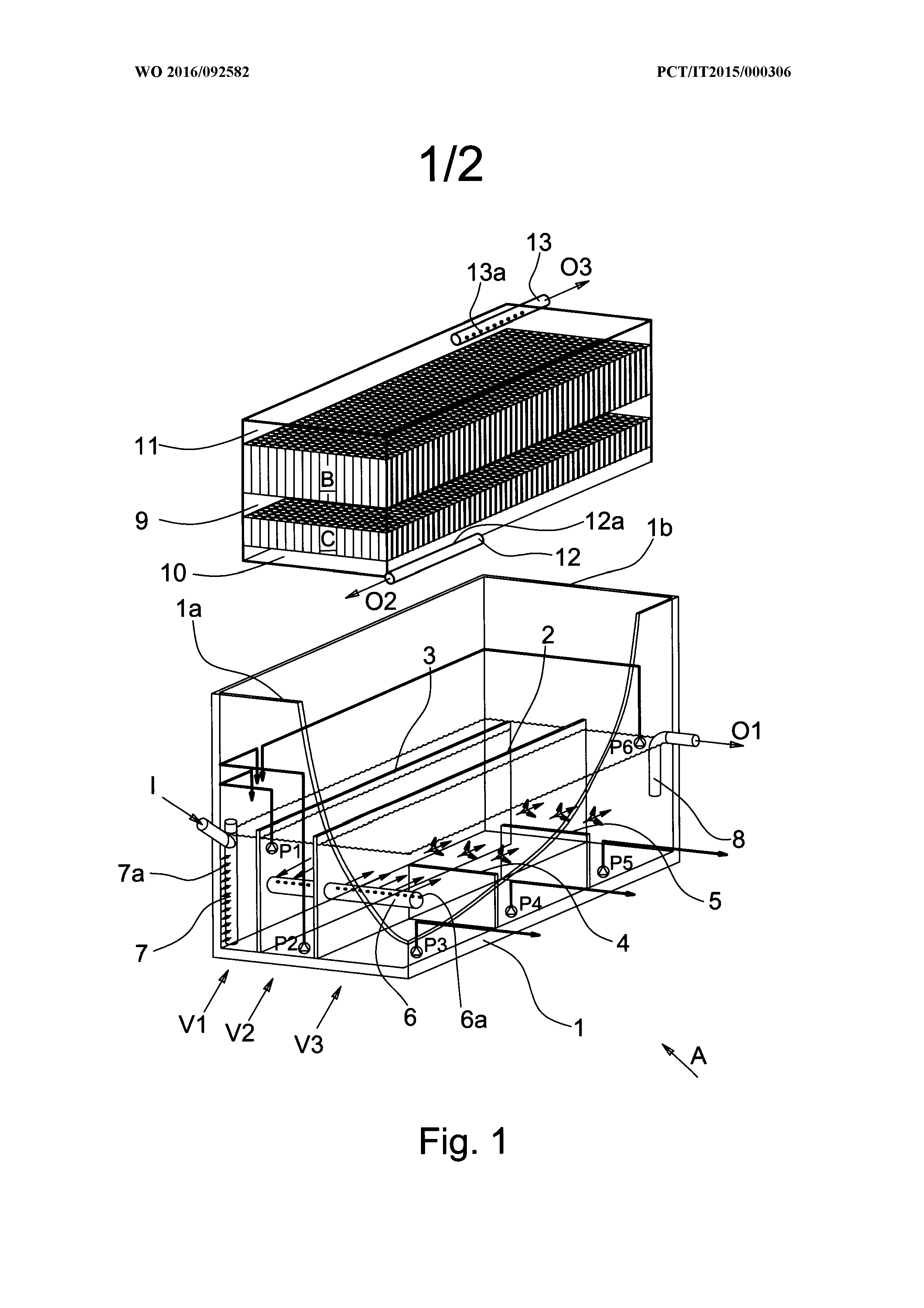
d) Clarified water: the clear fraction that remains after the separation of the other components is expelled by gravity and thermally pre-treated in the last part of the tank at half level;

The gases produced during the process (methane and carbon dioxide) rise towards the top of the tank, where they separate by density and start non-specific functions. Carbon dioxide, being heavier, remains in the lower part of the space above the liquid surface, while methane, being lighter, moves towards the upper part of the space. Gases are extracted through pipes with holes that are connected to gas storage or utilization systems. The device also includes a lighting and cooling system to prevent the formation of hydrogen sulfide, a toxic gas that can result in anaerobic digestion, damaging it. Lighting stimulates photosynthesis in some bacteria that consume hydrogen sulfide in the absence of oxygen. Cooling condenses water vapor in the gas phase and returns it to the liquid phase .

[***SDGs / UN\_en***](https://sdgs.un.org/goals) ***-*** [***SDGs / UN\_it***](https://sdgs-un-org.translate.goog/goals?_x_tr_sl=en&_x_tr_tl=it&_x_tr_hl=it&_x_tr_pto=wapp) ***Full Strategy to***

[***1***](https://sdgs.un.org/goals/goal1)[***2***](https://sdgs.un.org/goals/goal2)[***3***](https://sdgs.un.org/goals/goal3)[***4***](https://sdgs.un.org/goals/goal4)[***5***](https://sdgs.un.org/goals/goal5)[***6***](https://sdgs.un.org/goals/goal6)[***7***](https://sdgs.un.org/goals/goal7)[***8***](https://sdgs.un.org/goals/goal8)[***9***](https://sdgs.un.org/goals/goal9)[***10***](https://sdgs.un.org/goals/goal10)[***11***](https://sdgs.un.org/goals/goal11)[***12***](https://sdgs.un.org/goals/goal12)[***13***](https://sdgs.un.org/goals/goal13)[***14***](https://sdgs.un.org/goals/goal14)[***15***](https://sdgs.un.org/goals/goal15)[***16***](https://sdgs.un.org/goals/goal16)[***17***](https://sdgs.un.org/goals/goal17)[**SDGs/UN**](http://www.expotv1.com/JWT_to_SDG_UN.pdf)

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# IASR International Application Status Report

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(54) Title (EN): METHOD FOR ANAEROBIC DIGESTION AND DEVICE FOR IMPLEMENTING SAID METHOD

(54) Title (FR): PROCÉDÉ DE DIGESTION ANAÉROBIE ET DISPOSITIF POUR LA MISE EN ŒUVRE DUDIT PROCÉDÉ

(57) Abstract:

(EN): This invention relates to a method and to a device for the implementation of said method, to decompose and to selectively extract methane, carbon dioxide, NPK salts (nitrogen, phosphorus and potassium salts) of various titre and clarified water, from an organic matrix; said components will be the raw material for further industrial processes. The method is characterized in that it includes the following phases: • implementation of a hydrolytic phase, constituted by the fission action by means of the water, by hydration; • implementation of a acidogenesis phase generated by means of specific bacteria; • implementation of a acetogenesis phase generated by means of specific bacteria; • implementation of a methanogenesis phase by means of specific bacteria, with a simultaneous gravimetric separation of a mainly oleic phase, lighter and of a predominantly protein phase, heavier; • gravimetric separation of solutions of said NPK salts of different titres • taking of clarified water. The device is characterized in that it comprises a basin (1) divided into various zones (V1), (V2), (V3), in each of which biological reactions occur, in accordance with the claimed method, said zones being all communicating and identified by suitable separation baffles, in particular: • a first baffle (2) extended from a first end (1a) of the basin to a second end (1b) of said basin (1), dividing it into two parts; • a second baffle (3), of height equal to said first baffle that divides one of said parts in a first zone (V1) and in a second zone (V2) extending from said first end (1a) of the basin (1) until it reaches the vicinity of said second end of the basin (1), so that said two zones (V1) and (V2) are communicating through an opening, of substantially vertical development, between the end of said second baffle (3) and the second end (1b) of the basin (1); • a plurality of baffles (4) and (5) transversely arranged to said first baffle (2) and inside a third zone (V3), delimited by said first baffle (2), said third zone (V3) being placed in communication with said second zone (V2) through a transfer pipe (6), positioned at about half height of said first baffle (2); • two blocks (B) and (C), placed in the upper part of said basin (1) and provided by taking means (12, 12a, 13, 13a), each of said blocks (B) and (C) including a plurality of vertical pipes and being fitted to carry out a gravimetric separation of the gases that are generated during the treatment of said mixture; said baffles (2) and (3) and said transfer pipe (6), by identifying a path crossed by the liquid mixture to be treated, that runs into the beginning of said first zone (1) where it is placed an inlet pipe (7) of the liquid mixture to be treated and comes out from various points of said third zone (V3).

(FR): La présente invention concerne un procédé et un dispositif pour la mise en œuvre dudit procédé, pour décomposer et extraire sélectivement du méthane, du dioxyde de carbone, des sels de NPK (sels d'azote, de phosphore et de potassium) de titres divers et de l'eau clarifiée, à partir d'une matrice organique; lesdits composants constituant la matière première pour d'autres procédés industriels. Le procédé est caractérisé en ce qu'il comprend les phases suivantes : mise en œuvre d'une phase hydrolytique, constituée par l'action de fission au moyen de l'eau, par hydratation; mise en œuvre d'une phase d'acidogénèse au moyen de bactéries spécifiques; mise en œuvre d'une phase d'acétogénèse au moyen de bactéries spécifiques; mise en œuvre d'une phase de méthanogénèse, au moyen de bactéries spécifiques, avec séparation gravimétrique simultanée d'une phase principalement oléique, plus légère, et d'une phase principalement protéique, plus lourde; séparation gravimétrique de solutions desdits sels de NPK de titres différents; prélèvement de l'eau clarifiée. Le dispositif se caractérise en ce qu'il comprend un bassin (1) divisé en différentes zones (V1) (V2), (V3), dans chacune desquelles ont lieu des réactions biologiques, conformément au procédé de l'invention, lesdites zones étant toutes communicantes et identifiées par des chicanes de séparation appropriées, en particulier : une première chicane (2) s'étendant d'une première extrémité (1a) du bassin jusqu'à une deuxième extrémité (1b) dudit bassin (1), le divisant en deux parties; une deuxième chicane (3), de hauteur égale à celles de ladite première chicane qui divise l'une desdites parties en une première zone (V1) et en une deuxième zone (V2) s'étendant entre ladite première extrémité (1a) du bassin (1) et le voisinage de ladite seconde extrémité du bassin (1), de sorte que lesdites deux zones (V1) et (V2) communiquent par une ouverture, de développement sensiblement vertical, entre l'extrémité de ladite deuxième chicane (3) et la seconde extrémité (1b) du bassin (1); une pluralité de chicanes (4) et (5) placées transversalement par rapport à ladite première chicane (2) et à l'intérieur d'une troisième zone (V3), délimitée par ladite première chicane (2), ladite troisième zone (V3) étant mise en communication avec ladite deuxième zone (V2) par un tuyau de transfert (6), placé à environ la moitié de la hauteur de ladite première chicane (2); deux blocs (B) et (C), placés dans la partie supérieure dudit bassin (1) et munis de moyens de prélèvement (12, 12a, 13, 13a), chacun desdits blocs (B) et (C) comprenant une pluralité de tuyaux verticaux et étant conçu pour effectuer une séparation gravimétrique des gaz qui se dégagent pendant le traitement dudit mélange; lesdites chicanes (2) et (3) et ledit tuyau de transfert (6) délimitant un trajet emprunté par le mélange liquide à traiter, qui s'étend du début de ladite première zone (1) dans laquelle est placé un tuyau d'entrée (7) du mélange liquide à traiter et sort par différents points de ladite troisième zone (V3).

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Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM

Declarations:

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate

Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America

