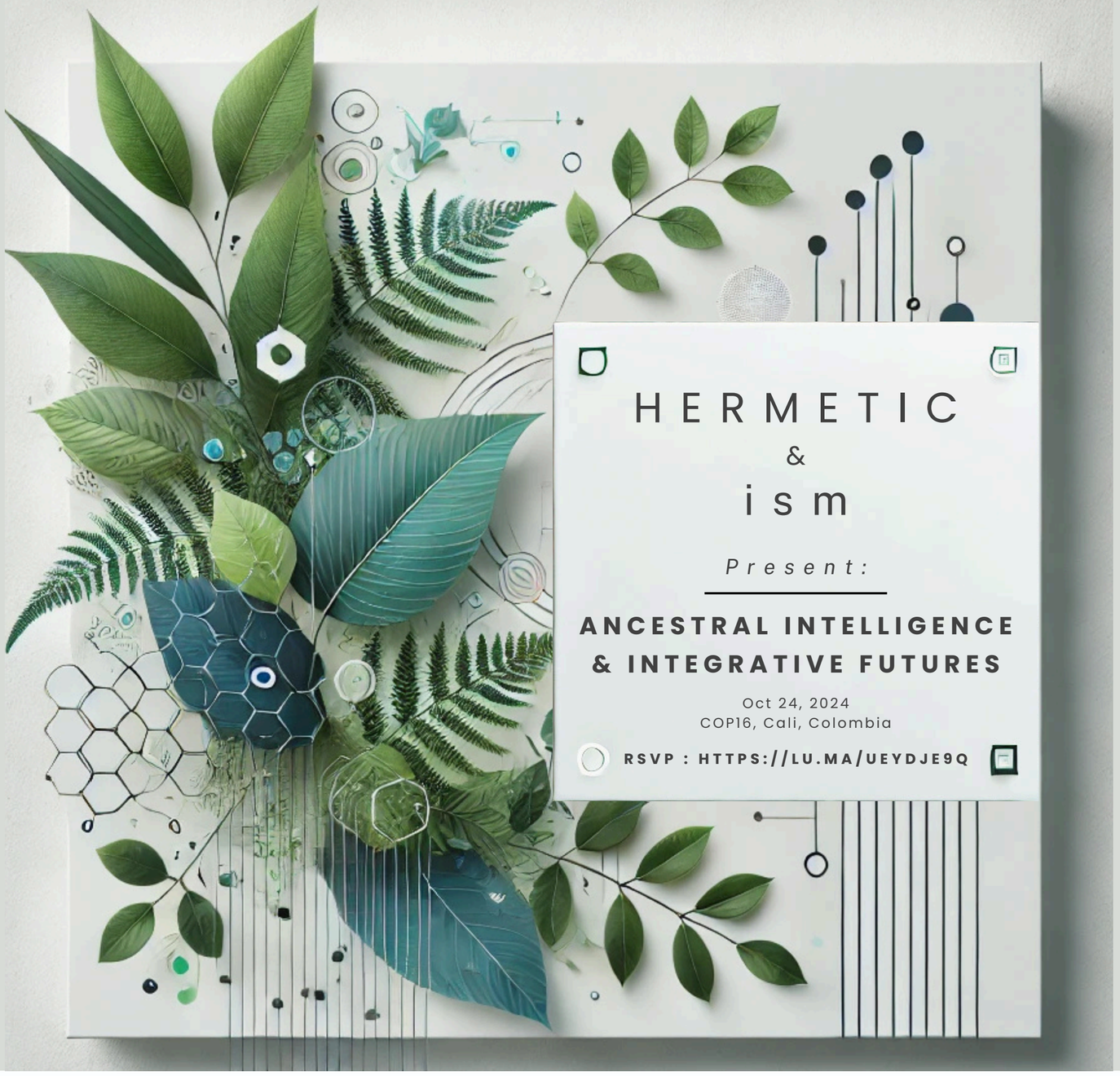
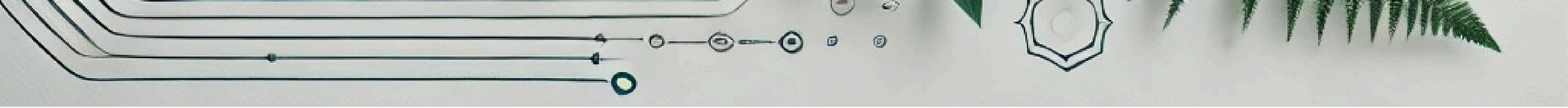


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THE NEXUS OF ANCESTRAL WISDOM & ARTIFICIAL INTELLIGENCE

Event Summary and Key Takeaways

Hermetic and ism hosted a gathering and workshop series at COP16 Biodiversity Summit in Cali, Colombia, in partnership with HUB Culture.

The event focused on the critical fusion of Ancestral Wisdom and Artificial Intelligence.

Experts shared insights and learnings around how traditional knowledge systems and contemporary technology can shape sustainable futures.

Discussions emphasized ethical technology integration, attributing ownership and rights to Indigenous communities, and developing technology tools that respect and enhance Indigenous wisdom, intellectual property, and values.

- **Ancestral Wisdom and Modern Technology:** Speakers explored how Indigenous knowledge might inform AI systems to benefit both humanity and the planet. The emphasis was on AI as a tool, not a solution, requiring ethical application and respect for traditional knowledge to address climate challenges effectively.
- **Data Autonomy and Ethics:** The event highlighted the significance of creating technology solutions that uphold Indigenous cultural and data autonomy. Discussions underscored the importance of designing tools that respect Indigenous languages and cultural practices while retaining data sovereignty for data creators.
- **Funding and Capital Equity:** Panelists discussed inequity in natural capital funding, noting that while technology solution providers often receive significant investment, Indigenous communities face challenges in accessing resources necessary for sustaining their environmental stewardship. The talks advocated for financial models that fairly compensate communities who have historically and currently preserve natural ecosystems across the Amazon.

THE NEXUS OF ANCESTRAL WISDOM & ARTIFICIAL INTELLIGENCE

Speakers & Panelists



MARQUES ANDERSON

CEO // ism

ism



EUGÉNIA CARRARA

Executive // Nature Based Solutions



ŊĶWɪ FLORES

Founder & PI // Kinray Hub

Kinray Hub



GISEL BOOMAN

Chief Scientist // Regen Network

REGEN NETWORK



VIRGILIO VIANA

General Director // Foundation for Amazon Sustainability (FAS)

FAS | BLOG DO VIRGILIO VIANA

THE NEXUS OF ANCESTRAL WISDOM & ARTIFICIAL INTELLIGENCE

Strategic Takeaways



- **Integrating Ancestral and Artificial Intelligence:** Ancestral intelligence can be integrated with AI to enhance both ecological and cultural sustainability.
- **Prioritize Technology & Ethics:** Indigenous communities must have substantial control over projects involving their lands, with technology serving as a tool for empowerment, not exploitation.
- **Indigenous Autonomy in Environmental Monitoring:** Indigenous autonomy in environmental monitoring and data usage is crucial for ethical development.
- **Equitable Financial Models:** Structured financial models to ensure equitable resource distribution, prioritizing Indigenous stewardship.
- **Local Leadership in Conservation:** To ensure longevity and impact, conservation efforts must be community led, with local leaders in governance and execution roles.
- **Ai Augmentation:** Tools like AI can be developed to support, not replace, traditional ecological knowledge.
- **Respectful and Ethical Partnerships:** Creating partnerships based on respect, trust, and ethical engagement is essential for successful collaboration.
- **Culturally Informed Technology:** Technology in conservation should reflect a deep respect and understanding of Indigenous cultural practices.
- **Impact of Initiatives:** Technology and environmental initiatives must consider their long-term impact on both human and natural systems.

KEYNOTE : THE NEXUS OF ANCESTRAL WISDOM & ARTIFICIAL INTELLIGENCE

Join Marques Anderson for a in-depth exploration tracing pathways of ancestral wisdom into new technological futures.



MARQUES ANDERSON

CEO // ism

ism

Marques Anderson, founder and CEO of ism, is an accomplished Cyborg Anthropologist and global visionary, has dedicated 15 years to aligning academia, technology, and community implementation.

In his role as a Cyborg Anthropologist, Marques seeks to understand the evolving relationship between humans and technology in our ever-changing world. Through this exploration, he examines the integration of humans with machines, analyzing the social implications, cultural shifts, and business challenges that arise from this fusion.

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COP16, Cali, Colombia

www.ism.earth

THE NEXUS OF ANCESTRAL WISDOM & ARTIFICIAL INTELLIGENCE





MARQUES ANDERSON

CEO // ism

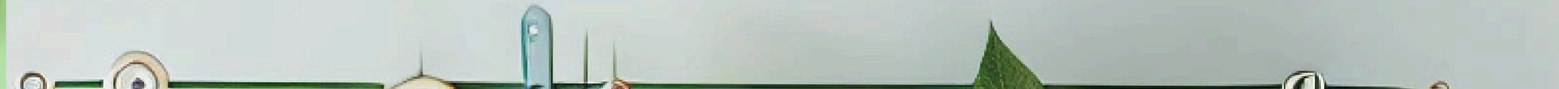
ism

Marques delved into the fusion of Ancestral Intelligence and Artificial Intelligence as a blueprint for sustainable, earth-positive futures. Drawing from his work in cyborg anthropology, Marques shared how technology is reshaping human behavior and society. He stressed that AI must enhance, rather than replace, Indigenous knowledge systems, which have long provided sustainable models for community well-being and environmental stewardship.

Key Takeaways:

- AI can be designed to honor Indigenous wisdom, ensuring technology supports collective well-being and actualization, rather than individualism and extraction.
- Cyborg anthropology examines the relationship between humans and technology, highlighting how lines are being dissolved between humans and machine, as technology becomes increasingly intertwined with daily life.
- Legacy and purpose are central to innovation; we must consider the impact of our choices on future generations with holistic and ethically grounded technological frameworks.
- The most meaningful technology progress comes from reconnecting with the earth, learning from ancestral practices to foster sustainability.

> *“Ancestral wisdom has sustained life for millennia. Ai should amplify this wisdom, not overwrite it.”*



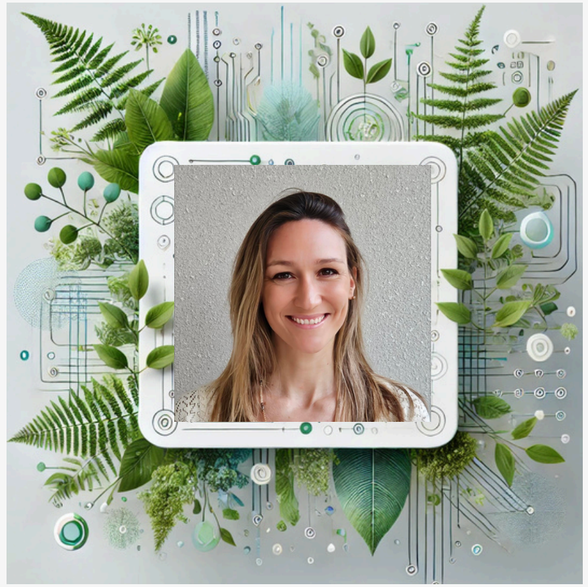
PANEL : THE NEXUS OF ANCESTRAL WISDOM & ARTIFICIAL INTELLIGENCE

This panel explores the transformative integration of ancestral wisdom and artificial intelligence in order to reshape our understanding and interaction with the natural world, forging pathways toward more regenerative futures.



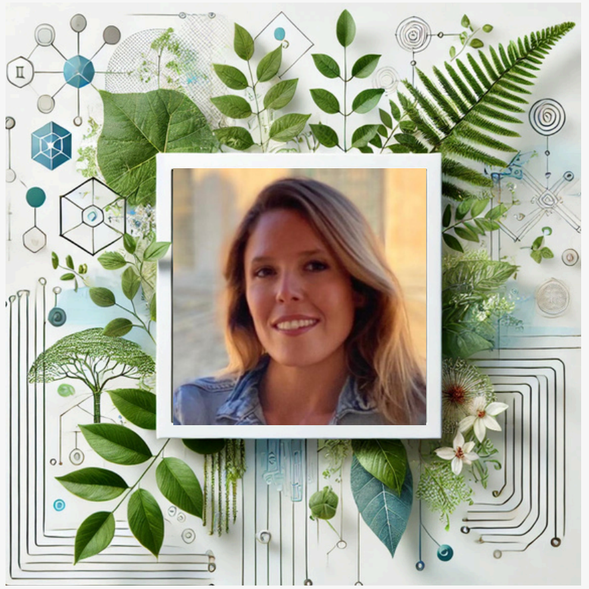
MARQUES ANDERSON

CEO // ism



GISEL BOOMAN

Chief Scientist // Regen Network



EUGÉNIA CARRARA

Executive // Nature Based Solutions



CHRISTOPHER KROHN

Founder // Hermetic

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PANEL : THE NEXUS OF ANCESTRAL WISDOM & ARTIFICIAL INTELLIGENCE







MARQUES ANDERSON

CEO // ism

GISEL BOOMAN

Chief Scientist // Regen Network

EUGÉNIA CARRARA

Executive // Nature Based Solutions

The panel explored how Indigenous knowledge systems, deeply connected to nature and biodiversity, can guide the ethical development of modern technologies, especially AI. It is vital that technology does not overwrite or bias Indigenous decision-making processes, while ensuring ownership, financing, and autonomy are retained by communities in order to preserve cultural heritage and meaningful coexistence with the environment and its preservation for generations to come.

Key Takeaways:

- Indigenous wisdom offers invaluable insights into biodiversity management, which can be harmonized with AI for land stewardship, linguistic preservation, and environmental monitoring.
- Ethical AI development must center around Indigenous rights, respecting their traditional governance models, and allowing communities to utilize tech on their own terms.
- Digital tools have brought benefits but also challenges, such as the erosion of traditional skills, we need intentional, inclusive, and ethical technology to avoid alienating communities from their cultural roots.
- Equitable funding for Indigenous-led initiatives are crucial. Communities must benefit culturally and financially from projects.

> *“Technology must respect Indigenous governance and be culturally informed, allowing communities to benefit on their own terms.”*
>
> -EUGÉNIA CARRARA

KEYNOTE : STRENGTHENING INDIGENOUS SHAREHOLDERSHIP ACROSS ENVIRONMENTAL MARKETS



Kinray Hub
Indigenous-led R&D

@NkwiFlores

ŊĶWI FLORES

Founder & PI // Kinray Hub

Ŋķwi Flores is an Indigenous researcher, knowledge manager, and community catalyzer (with expertise in the transboundary Andes and Amazon bioregions).

He is founder of Kinray Hub, a nonprofit creating models and technology to build capacity for regeneration and sustainable development in decentralized Indigenous and local communities regionally and de/scalable globally.

Kinray Hub recognizes the critical role of Indigenous innovation and ingenuity in the biodiversity crisis, and is seeding a digital and physical bioculture of verified Indigenous representatives, financiers, and scientists to facilitate the swift creation of trustworthy projects, and to provide the cultural habitat for the knowledge and financial exchange needed for ongoing project success.

Oct 24, 2024
COP16, Cali, Colombia

www.kinrayhub.org

STRENGTHENING INDIGENOUS SHAREHOLDERSHIP ACROSS ENVIRONMENTAL MARKETS



ŊĶWɨ FLORES

Founder & PI, Kinray Hub

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Indigenous-led R&D

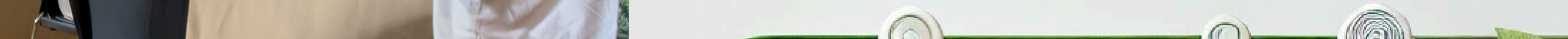


Ŋķwɨ offered a framework for biocultural ethics, data sovereignty, and shareholdership, offering a path for more ethical and effective environmental markets that center Indigenous rights and values. True engagement with Indigenous communities respects and is complementary to their distinct governance, political, and economic systems. It requires genuine relationship-building that goes beyond formal protocols and actively engages with community members on a personal level.

Key Takeaways:

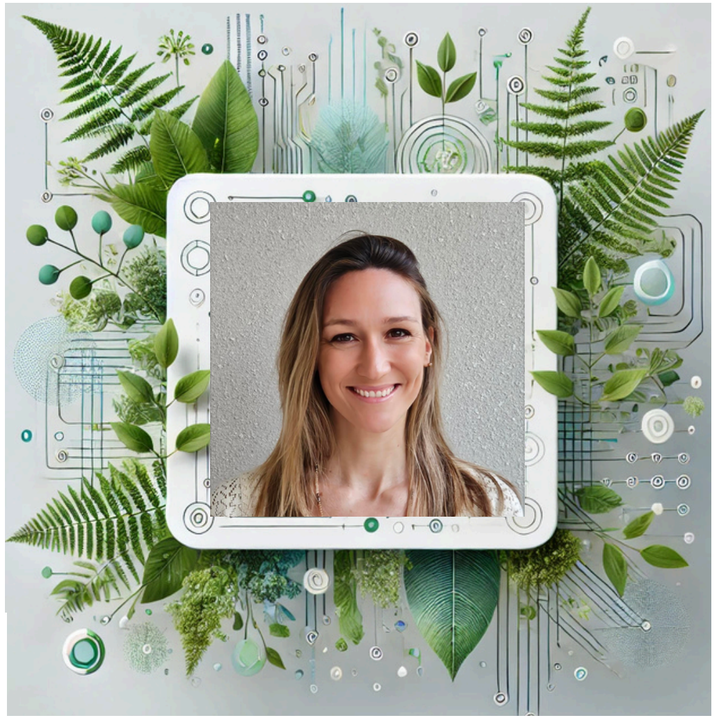
- Indigenous communities are sovereign nations with the right to govern their lands, resources, and data of all types. They can invite or decline external involvement, and their collective authority and self-determination must comply with agreements that enable withdrawal at any stage and grievance mechanisms.
- Cyclical and relational contracts should be employed to ensure Indigenous communities benefit from economic participation.
- Data generated from/by/for Indigenous lands must remain under the governance of the community, complying with its provenance, permanence, and pertinence, as well as the right to sustainable development goals. Disaggregation and misuse of data from it violate Indigenous sovereignty, integrity, and rights to the data lifecycle of all forms.
- Indigenous R&D, relational science production, and authentic relationship-building must center biocultural ethics on bringing Indigenous knowledge systems into governance transparently.

> *“Data is energy, energy cannot be destroyed, only transformed. Data is no different, it holds provenance and pertinence that cannot be disaggregated from Indigenous rights.”*



CASE STUDY : REGEN NETWORK NEW PROJECTS

Join Gisel Booman in exploring Regen Network's latest projects from the field



REGEN NETWORK

GISEL BOOMAN

Chief Scientist // Regen Network

Environmental Markets Specialist with a Ph.D. in Landscape Ecology. Expert in voluntary carbon, biodiversity, and water markets, with a proven track record of collaborating with global organizations and indigenous communities.

Bridging cutting-edge research with practical, market-driven solutions to scale regenerative practices and foster resilient ecosystems worldwide.

Creative thinker and innovator, passionate about developing novel approaches to regenerate our planet.

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CASE STUDY : REGEN NETWORK NEW PROJECTS



GISEL BOOMAN

Chief Scientist
Regen Network

REGEN NETWORK



Gisel shared the innovations of Regen Network in developing biocultural crediting mechanisms for indigenous-led conservation and sustainable ecosystem management. These credits, such as the projects with the Sharamentsa and Siekopai communities in Ecuador, rooted in the interconnectedness of cultural heritage and biodiversity, are Indigenous-led and emphasize right relationship agreements to safeguard both land and culture.

Key Takeaways:

- Biocultural credits are designed to respect both biodiversity and cultural values, emphasizing Indigenous-led projects that maintain land and cultural integrity while also applying advanced monitoring and data systems technology to ensure project integrity.
- Biocultural credit structures grant significant control to Indigenous communities who lead conservation efforts, with the majority of project funds directly managed by community assemblies.
- Projects should support rather than lead, offering technical enablement and autonomy, without overreach.
- Integrating local ecological knowledge with modern technologies like blockchain, satellite imagery, and remote sensing allow Indigenous groups to independently manage and benefit from environmental programs, while respecting privacy through transparent and customizable data-sharing options.

> *“This is not merely a project; it’s a response to an invitation from the community itself, a way to serve the sovereign dream of life-affirming governance.”*

KEYNOTE : ETHNOECOLOGICAL KNOWLEDGE OF INDIGENOUS PEOPLES FOR CLIMATE ADAPTATION AND BIODIVERSITY CONSERVATION



BLOG DO VIRGILIO VIANA

VIRGILIO VIANA

General Director // Foundation for Amazon Sustainability (FAS)

Virgilio Viana is currently the General Director of the Foundation for Amazon Sustainability (FAS). Virgilio is a forest engineer, with a Ph.D. in Evolutionary Biology from Harvard University and a postdoctoral research in sustainable development at the University of Florida.

He is a former, president of the Brazilian Society of Ethnoecology & Ethnobiology, and the former State Secretary for Environment and Sustainable Development of Amazonas, Brazil, responsible for reducing deforestation by 66%.

He is also currently the coordinator of the Sustainable Development Solutions Network - Amazonia (SDSN), member of the Vatican's Pontifical Academy of Social Sciences, creator of the Covid Amazon Alliance, a founding member of the Friends of the Amazon Institute, an associate professor at the Dom Cabral Foundation and a member of the Council for Sustainable Social Economic Development.

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ETHNOECOLOGICAL KNOWLEDGE OF INDIGENOUS PEOPLES FOR CLIMATE ADAPTATION AND BIODIVERSITY CONSERVATION





VIRGILIO VIANA

General Director,
FAS

BLOG DO VIRGILIO VIANA

Virgilio shared the urgent need for adaptation-focused solutions in the Amazon, pointing to Indigenous knowledge as critical for climate resilience. He emphasized the importance of ethical partnerships, adaptation, and the role of local leadership to address environmental and social challenges to preserve the Amazon and its people. Virgilio proposed educational reforms that empower local communities to preserve cultural heritage, while promoting cooperation over competition among stakeholders.

Key Takeaways:

- The Amazon faces unprecedented climate events, including record floods and droughts. Indigenous communities, as stewards of nature-based solutions, must be empowered ethically to tackle these challenges
- Cooperation among conservation organizations is essential, as competition for resources and attention can undermine efforts to protect the Amazon and other critical ecosystems.
- AI should complement ancestral wisdom and provide pathways for fair compensation while considering the unique knowledge lineages of communities in its design and implementation.
- Cultural erosion is accelerating as indigenous elders pass away. Community-based educational initiatives and technology literacy programs can engage youth and preserve oral traditions.

> *“We are at a very critical moment, the Amazon is collapsing and we must urgently steward a new generation of community leaders to ensure resilience in the face of ecological tipping points.”*



WORKSHOP PROMPTS : ANCIENT WISDOM AND REGENERATIVE FUTURES

FUTURE CASTING:

Envision a world in which ancient wisdom and technology are interwoven in such a way as to enable a regenerative future.

WISDOM & TECH SYNERGIES

1. How does creating a symbiotic relationship with technology shape and align your personal and collective values?
2. How do we design technology with safeguards and pathways that embed values, ensuring they are brought to life in the world?

INDIGENOUS SHAREHOLDERSHIP

1. How could collaboration with Indigenous communities enhance the ethical development and use of technologies in environmental conservation?
2. How might we design partnership models that respect and incorporate Indigenous practices, enabling more holistic and sustainable environmental management strategies?

SCIENCE & DATA MANAGEMENT

1. In what ways might data management systems be inspired by the connectivity of ancestral wisdoms to enhance ecological and cultural data coherence and utility?
2. How do we build systems that not only collect data but also allow it to be experienced and transmitted in meaningful ways across generations?

RIGHTS OF NATURE

1. How might the ethical application of "Rights of Nature" reshape governance models?
2. If natural entities like rivers or forests had legal rights, how would this change the way we design, build, and implement technologies that utilize resources from or interact with these environments?

HOSTED BY:

HERMETIC

Ecological & Economic Data Modeling



CHRISTOPHER KROHN

Founder, HERMETIC

Chris has spent his career at the intersection of technology, innovation, and systems design. He develops and stewards multi-stakeholder ecosystems and programs for Fortunes, Funds, Startups, and Cities – designing and launching incubators, pilots, and investment portfolios.

Chris is the founder and CEO of Hermetic – an earth-focused venture and technology group, founder of BxC (Blockchain x Climate), and spent nearly a decade as a Director of IDEO's Climate Portfolio – investing, accelerating, and piloting circular economy and climate solutions on a global scale.



BROOKS TYRRELL

Founder, HERMETIC

Brooks is a founder of Hermetic // an earth-focused venture and technology group building tools to dynamically assess and optimize the ecological and economic value of land and stewardship practices at scale.

Founder of Hearth Co. a regenerative housing development company – designing and constructs housing communities that utilize living building design, ecosystem restoration practices, and community oriented living.

Oct 24, 2024

COP16, Cali, Colombia

www.hermetic.earth

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Present:

ANCESTRAL INTELLIGENCE & INTEGRATIVE FUTURES

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