

A photograph of a man sitting on a cracked, dry landscape under a blue sky. The man is shirtless, wearing a patterned wrap around his waist and sandals. He is looking up and to the right. The ground is covered in dark, jagged rocks, suggesting a dry, arid environment. The sky is a clear, deep blue.

# CLIMATE ACTION INNOVATIONS

---

# 01

---

## ABOUT VOICES OF SUSTAINABILITY

Voices of Sustainability is a thought leadership platform launched by the Zayed Sustainability Prize to explore the challenges and opportunities of the global transition to an inclusive and

prosperous future. Each month, the series hosts some of the top global thought leaders to discuss the latest trends and themes in the sustainability agenda.



# 02

## INTRODUCTION

The Zayed Sustainability Prize hosted the 28<sup>th</sup> episode of its virtual fireside chat series called Voices of Sustainability, which featured Robert Niven, CEO, CarbonCure; Virgilio Viana, General Director, Foundation for Amazon Sustainability, Caroline Slootweg, Co-founder, Kelp Blue; and Rob Bradley, Managing Director, Climate Change and Sustainability Services, Ernst & Young, as moderator.

The insightful dialogue served as a platform to introduce the Climate Action finalists of our new category, shedding light on their innovative approaches to addressing climate challenges and illustrating the transformative potential of collaborative endeavours in effecting positive change. Additionally, these experts shared their perspectives on anticipated outcomes at COP28 UAE, offering valuable insights into the possibilities that lie ahead.



# 03

## SUMMARY

In the 28<sup>th</sup> episode of 'Voices of Sustainability' that aired on 28 September 2023, the stage was set to announce the three finalists in the new Climate Action category. The anticipation was palpable as these finalists represent innovative solutions to tackle climate change. The winner, whose groundbreaking work will be announced at COP28 UAE, will undoubtedly play a significant role in the global effort to combat climate change.

The episode began with the organisation heads introducing their important work to the world. Caroline Slootweg, co-founder of Kelp Blue, introduced her organisation's pioneering work cultivating giant kelp, the largest species of seaweed globally, in the ocean that sequesters and stores carbon. But their impact goes beyond carbon capture. Kelp acts as an ecosystem engineer, providing shelter for marine life, and their cultivation creates jobs while contributing to soil health and food security.



We're creating jobs and tackling environmental issues through ocean kelp cultivation. We offer year-round employment for communities seeking sustainable livelihoods, requiring diverse skills like engineering, diving, and marine monitoring. Our kelp forests also combat ocean acidification, enhancing water health.

**Caroline Slootweg**  
Kelp Blue



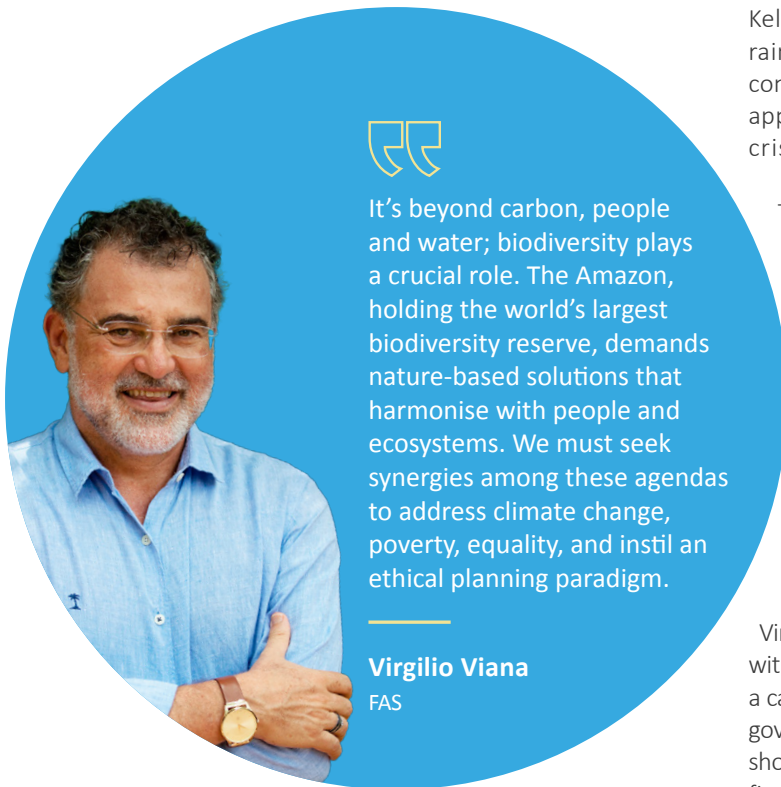
I prioritise scale, business models, and technology development. Our goal is to offer sustainable concrete without added cost, making it accessible and eco-friendly for users, driving our approach to scaling.

**Robert Niven**  
CarbonCure



Caroline emphasises the importance of showcasing innovative solutions like hers at COP, where the world can witness the transformative potential of such initiatives.

Virgilio Viana, founder and CEO of the Foundation for Amazon Sustainability (FAS), shares his holistic approach to preserving the Amazon rainforest. FAS collaborates with indigenous communities to protect this vital ecosystem, understanding that the Amazon is crucial for a stable climate. The reduction in deforestation by over 60% in the areas where FAS operates is proof that people-centric strategies can yield positive results. Virgilio stresses the need for COP28 UAE to mobilise financial commitments, engage business communities, and raise awareness about the urgent climate crisis.



It's beyond carbon, people and water; biodiversity plays a crucial role. The Amazon, holding the world's largest biodiversity reserve, demands nature-based solutions that harmonise with people and ecosystems. We must seek synergies among these agendas to address climate change, poverty, equality, and instil an ethical planning paradigm.

**Virgilio Viana**  
FAS

Rob Niven, representing CarbonCure Technologies, explains how their revolutionary technology tackles the carbon footprint of concrete production. Concrete is a major emitter of greenhouse gases, contributing to 7% of global emissions. CarbonCure's innovative solution injects CO<sub>2</sub> into concrete, permanently sequestering it while making the concrete even stronger. Rob underlines the importance of scalability and business models that don't impose a green premium. His hope for COP28 UAE is a coalition of the willing, including governments, to prioritise sustainable procurement, sending market signals for more sustainable products.

As we look forward to COP28 in the UAE, these three finalists showcase the incredible potential of human innovation and determination to combat climate change.

Kelp Blue's kelp cultivation, Virgilio Viana's Amazon rainforest protection model, and Rob Niven's concrete revolution all highlight the diverse approaches needed to address our planet's climate crisis.

The speakers were asked about their hopes and expectations for the climate outcomes they hope to see arise at COP28 UAE. Caroline began with a recognition that showcasing and supporting innovative solutions reflects the very essence of COP. It's not just a forum for negotiations but a platform where groundbreaking ideas can gain the recognition they deserve. The urgent need for financial commitments to unlock capital flows, shift from old investment models to new ones, and promote nature-based solutions is paramount.

Virgilio's emphasis on a sense of emergency resonates with the current climate reality. COP28 UAE must act as a catalyst for a coalition of the willing, bringing together governments, business communities and civil society. It should tap into the vast liquidity in the world, engaging financial resources on an unprecedented scale to address the global boiling scenario.

Rob's focus on government procurement as a climate change strategy is vital. Governments, as the largest buyers of concrete, possess immense influence. By setting sustainability requirements for products like concrete, they can stimulate innovation and decarbonisation in industries. Rob's hope for COP28 UAE is that it recognises the critical role of such market signals in driving climate action.

In conclusion, COP28 UAE holds the promise of being a turning point in the global fight against climate change. These three finalists and their sustainable initiatives remind us that solutions are within reach. With innovative approaches, collective action and a sense of urgency, we can navigate the climate crisis. The winner, to be announced on 1 December, will undoubtedly be a shining example of what can be achieved when sustainability meets determination.

# 04

## PARTICIPANTS



### Caroline Slootweg

Co-Founder, Commercial And Communication  
Kelp Blue

A start-up, change management and digital transformation specialist, Caroline has worked at Unilever, WPP, in mar-tech and agri-tech. Her purity of purpose expresses itself as clarity, simplicity and speed.

Caroline sailed half-way around the world and across the Pacific Ocean in the Clipper Round the World yacht race and is also a keen forager and traveller.



### Virgilio Viana

General Director  
The Foundation for Amazon Sustainability (FAS)

Virgilio Viana is currently the General Director of the Foundation for Amazon Sustainability (FAS); collaborating professor at the graduate program at the National Institute of Amazon Research (INPA); chair of the UN initiative on Sustainable Development Solutions Network for the Amazon (SDSN Amazonia).

Professor Virgilio Viana is a forest engineer, with a Ph.D. in Evolutionary Biology from Harvard University and postdoctoral research in sustainable development at the University of Florida. He is a former professor of forest sciences at the Luiz de Queiroz School of Agriculture (ESALQ/USP) from 1989 to 2003; former State Secretary for Environment and Sustainable Development of Amazonas, Brazil, from 2003 to 2008; former President of both the Brazilian Society of Ethnobiology and Ethnoecology and the São Paulo Association of Forest Engineers; founder of both the Amazon COVID Alliance and of the Friends of the Amazon Institute (IAMA).



### Robert Niven, MSc

Chair and Chief Executive Officer  
CarbonCure

Robert Niven is the Chair and Chief Executive Officer of CarbonCure Technologies, the global leader in carbon dioxide (CO<sub>2</sub>) removal technologies for the concrete industry. Rob founded the company in 2012 with the simple goal of making concrete sustainability both profitable and easy for the industry. With Rob at the helm, CarbonCure and its partners are achieving their mission to annually reduce and remove 500 million metric tons of CO<sub>2</sub> emissions from the atmosphere annually.

Featured as one of Canada's Top 40 Under 40 for his leadership in CO<sub>2</sub> utilisation, Rob holds an MSc in Environmental Engineering from McGill University and a BSc in Chemistry from the University of Victoria, British Columbia. In his spare time, Rob is an avid outdoors enthusiast and devotes his time to nature conservation and environmental community events.

The conversation was moderated by:



### Rob Bradley

Managing Director of Climate Change  
and Sustainability Services (CCaSS)  
EY

# 05

---

## OUTCOMES

---



Kelp Blue's oceanic kelp cultivation offers a nature-based solution for carbon sequestration and marine ecosystem restoration

---



The Foundation for Amazon Sustainability's community-centred approach has significantly reduced deforestation rates in the Amazon rainforest

---



CarbonCure's innovative concrete technology permanently sequesters carbon dioxide, transforming a major emitter into a climate-friendly solution

---



The group hoped that COP28 UAE would foster a sense of urgency and collaboration among governments, businesses and civil society to combat climate change

---



Mobilising financial commitments and engaging businesses are critical to addressing the climate crisis at COP28

---



Governments can drive climate action by setting sustainability requirements in procurement, stimulating innovation in industries like concrete production

---

Watch the full episode the Zayed Sustainability Prize's YouTube channel

Follow our social media accounts for updates about upcoming episodes



[zayedustainabilityprize](#)

[ZSP\\_ORG](#)

[www.ZayedSustainabilityPrize.com](http://www.ZayedSustainabilityPrize.com)