

# SUSTAINABILITY TRENDS

MONTHLY NEWSLETTER

 **insaf**

Institute for Sustainability Africa

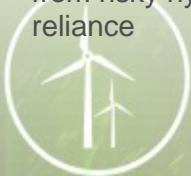
'Advancing Sustainability Initiatives for Africa'

## CLIMATE CHANGE

Climate change mitigation in Zimbabwe and links to sustainable development

## AFRICA

Solar can shift Africa away from risky hydropower reliance



## SUSTAINABILITY

20 Tech-Focused Business Practices That Promote Better Sustainability



Solar can shift Africa away from risky hydropower reliance

# SUSTAINABILITY HIGHLIGHTS

PAGE	TOPIC
3	How to modernize networks with sustainability in mind
3	Digital mining for sustainability in a low-carbon economy
3	Predicting The Pace of the Transition to Environmental Sustainability
3	How to select sustainability management software
4	20 Tech-Focused Business Practices That Promote Better Sustainability
4	Sustainability-linked bonds and how to use them credibly
4	Business schools must step up on sustainable investing education
4	Clear skies for a sustainable future: how innovation can accelerate aviation's net-zero journey
5	Solar can shift Africa away from risky hydropower reliance
5	Inclusion and Innovation Key to African Media Sustainability
5	Paradigm shift towards sustainable health financing in Africa
5	10 sustainability startups selected for Ecosystem Restoration Africa programme
6	The Zimbabwean Brands Inspiring a New Movement of Sustainable Fashion
6	Firms urged to create value for shareholders through sustainability reporting
6	TIMB promotes sustainable production
6	Climate change mitigation in Zimbabwe and links to sustainable development
7	About INSAF
8	Contact details

## How to modernize networks with sustainability in mind

When planning investments in network modernization, IT leaders should consider a strategy that embraces green networking and sustainability. Green networking uses networking devices and equipment in energy-efficient and eco-friendly ways. While the network configuration and topology don't need to change, the equipment enabling the network can be more energy-efficient. This strategy is essential to ensure that network components can be used for longer periods of time, reducing carbon footprints, damage to the environment and energy usage, which are among the foundational elements of sustainability. Over the past two decades, studies confirmed that networking affects the environment primarily through energy usage, especially as it relates to the release of greenhouse gases into the atmosphere by power generation systems. The internet, which comprises hundreds of data centers worldwide, is a huge user of energy resources. So too are hundreds of switching centers that connect businesses and consumers to the internet, wireless services, social media and each other. Cloud-based networks, such as AWS, Microsoft Azure and Google Cloud, are also significant energy users. Switching systems and computers located within the many network data centers all use considerable amounts of energy. **Read more:** <https://www.techtarget.com/searchnetworking/tip/How-to-modernize-networks-with-sustainability-in-mind>

## Digital mining for sustainability in a low-carbon economy



Managing Environmental, Social & Governance (ESG) performance was difficult for Indonesian mining company Petrosea. Using SAP solutions, Petrosea adopted a digital strategy, developing a platform to measure sustainability performance data. Since the Paris Agreement was signed in 2015, businesses have been taking part to contribute in pursuing net zero and achieve emission reduction targets. For Petrosea — a multi-disciplinary mining, infrastructure, and

oil and gas services company in Indonesia — attention shifted to pursuing more sustainable operations with lower carbon emissions. **Read more:** <https://www.cio.com/article/650492/digital-mining-for-sustainability-in-a-low-carbon-economy.html>

## Predicting The Pace of the Transition to Environmental Sustainability

The fire in Lahaina, Maui; extreme heat in Phoenix; floods in Vermont; and the yellow sky over New York City. The signs of a warming planet are everywhere, and the sense of urgency over the climate crisis grows. Each day, the newspapers report both on progress toward decarbonization and on political resistance from fossil fuel interests and communities opposing the siting of wind and solar farms. The sense of urgency seems lacking, and people enraged about climate change are stunned by those who do not share their sense of crisis. The difficulty with the transition to renewable resources is our continued massive investment in the infrastructure that supports a linear rather than circular economy. Some of the debt used to build these facilities is not yet retired. Turning this huge economic boat around is going to take time. We simply cannot turn off the current economy, and the transition to environmental sustainability will take a generation—around twenty years—before it is mostly complete. When thinking about the complexity of the task, look to your own lifestyle. How much fossil fuel energy do you use each day? We use it to preserve and cook food, to connect to the internet, to watch movies, to speak to our families and friends, to travel, and to maintain a comfortable temperature in our homes. **Read more:** <https://news.climate.columbia.edu/2023/08/28/predicting-the-pace-of-the-transition-to-environmental-sustainability/>

## How to select sustainability management software



For organizations serious about meeting environmental, social, and governance goals, sustainability management tools can collect relevant data, analyze it, and provide actionable insights. Here's what to look for and six leading tools to consider. Increasingly, organizations are under pressure from numerous stakeholders to incorporate sustainability practices into their business strategies. As companies set ambitious environmental, social, and governance (ESG) goals, they often look to providers

of sustainability management software to help them reduce their environmental impact and ensure employees are treated fairly. **Read more:** <https://www.computerworld.com/article/3704008/sustainability-management-software-esg-software-buyers-guide.html>



## 20 Tech-Focused Business Practices That Promote Better Sustainability

Digital technology has proven a boon for industry and society in many ways. Still, there's no question that both companies that build technology and the businesses that use their products could do a better job in pursuing more sustainable tech solutions. Take storage, for example: The Circular Drive Initiative, a group of technology companies that promotes the secure reuse of storage hardware, estimates that 90% of hard drives are destroyed rather than wiped and reused. While there are cybersecurity arguments for taking a zero-risk approach to the disposal of used hard drives, there are alternative, greener solutions that may be an option not only for better managing storage, but also for managing e-waste, powering operations and supporting other business functions. Below, 20 members of Forbes Technology Council discuss some technology-related practices business and industry could adopt for better sustainability. **Read more:** <https://www.forbes.com/sites/forbestechcouncil/2023/08/25/20-tech-focused-business-practices-that-promote-better-sustainability/?sh=111744905148>

## Sustainability-linked bonds and how to use them credibly



This story is part of our Decoding Sustainable Finance series, where we attempt to break down complex terminology surrounding the latest regulations and trends in sustainable finance. Doubts are starting to surface over the credibility of targets embedded in sustainability-linked bonds (SLBs) coming to market. The concerns over greenwash are sparking a response from standard-setters keen to ensure confidence in what many market participants still consider a promising financing instrument meant for holding companies accountable to their climate targets. Increasing investor scrutiny, alongside

macroeconomic uncertainty, has led to a slowdown in SLB issuance last year. In the first half of 2023, global SLB issuance further declined by 28 per cent year on year, according to credit rating agency Moody's. **Read more:** <https://www.eco-business.com/news/sustainability-linked-bonds-and-how-to-use-them-credibly/>

## Business schools must step up on sustainable investing education

Sustainable investing takes into account environmental, social and governance (ESG) factors alongside traditional financial components. While this form of investing has existed for a long time, ESG has become a hot-button issue due to recent politicization and widespread public misconceptions around what it really entails. ESG investing examines quantitative and qualitative non-financial data on companies. This includes environmental issues like carbon emissions, pollution and resource use; social issues like employee treatment and relationships with communities; and governance issues like diversity of corporate boards, business ethics and transparency. Criticisms of ESG investing have been exacerbated by post-secondary finance programs that barely touch upon these issues, resulting in a significant shortage of qualified sustainable investment professionals. **Read more:** <https://theconversation.com/business-schools-must-step-up-on-sustainable-investing-education-208352>

## Clear skies for a sustainable future: how innovation can accelerate aviation's net-zero journey

In a world where the urgency of combating climate change has reached new heights, few industries face as much scrutiny as the aviation sector. The skies have traditionally symbolized limitless potential, yet they also carry the burden of an undeniable carbon footprint. According to the International Energy Agency (IEA), aviation accounts for 2% of global greenhouse gas emissions. With air travel projected to increase over this decade, these emissions are only poised to further escalate. Today, there are limited low-carbon solutions and ground breaking advancements in sustainable aviation fuel (SAF) and alternative propulsion technologies. The significance of these innovations has never been more pronounced. Notably, the IEA forecasts that 50% of the emission reductions necessary for net-zero targets must be driven by technologies that are either still in their conceptual stages or have not yet attained the necessary scalability. At the core of aviation's decarbonization efforts is sustainable aviation fuel (SAF), which is key to helping reshape the industry's path for emissions reduction in the short to medium term. Current sustainable aviation fuel, mostly sourced from renewables, organics, or waste, is a compelling alternative to traditional jet fuel. Yet, scalability and feedstock limits hinder widespread adoption. Advanced fuel technologies, such as alcohol-to-jet and e-fuels (i.e. SAF85) are crucial for long-term decarbonization, but their nascent stages and lack of scalability pose challenges. **Read more:** <https://www.weforum.org/agenda/2023/08/clear-skies-for-a-sustainable-future-accelerating-aviations-net-zero-journey-with-innovation/>

## Solar can shift Africa away from risky hydropower reliance

Africa's hydropower has long been seen as a cornerstone of energy access and economic development, from the new Grand Ethiopian Renaissance Dam to the Kariba Dam, built in the 1950s to serve Zambia and Zimbabwe. But a new study suggests that with the rise of alternative renewables and more climate-driven risk for water resources, up to two-thirds of possible future hydropower plants in Africa are not worth the investment. The study from Politecnico di Milano researchers in Italy, alongside colleagues from Austria, Belgium, Ethiopia and the United States, found that in most places, the costs of solar and wind power have dropped enough across the last decade that they make a more cost-effective option than hydropower. The work was published in the journal Nature in August. **Read more:** <https://www.sustainability-times.com/low-carbon-energy/solar-can-shift-africa-away-from-risky-hydropower-reliance/>

## Inclusion and Innovation Key to African Media Sustainability



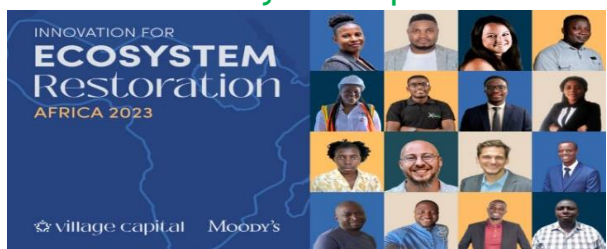
This year started on a high note for African media with the recent African Media Festival in February. Hundreds of media practitioners, funders, and state agencies gathered in Nairobi to reconnect, share expertise, and re-imagine African media. The reflections and debates all tied back to a common theme: African media's future is stable and potentially successful if business models are sustainable, innovative, and inclusive. African media has evolved in lockstep with maturing African democracies, constantly having to reinvent itself as it tested the boundaries of

restrictive regimes. Over the past decade, the industry has grappled with failing traditional business models in the face of the digital revolution, while accepting the reality of sharply falling revenues thanks to the domination of Big Data. Journalists have been put out of work and media businesses operating barely above water. Solutions have seemed elusive after the Pandemic exposed the massive inequalities these disruptions had triggered globally. **Read more:** <https://africanarguments.org/2023/04/inclusion-and-innovation-key-to-african-media-sustainability/>

## Paradigm shift towards sustainable health financing in Africa

Universal health coverage (UHC), embedded within the United Nations Sustainable Development Goals, is defined by the World Health Organization as all individuals having access to required health services of sufficient quality without suffering financial hardship. Sadly, effective strategies for financing healthcare, which are critical to achieving this goal, remain a challenge in Sub-Saharan Africa (SSA). Access to quality healthcare services without individuals suffering financial hardship remains a challenge in Africa. For a larger percentage of the African population, individuals' access to essential health services depends on direct out-of-pocket payments (OOPs), pushing millions of people further into poverty each year. One of the consequences of this is that millions of people do not seek quality treatment for their health issues, exacerbating the problem and increasing the burden of preventable deaths in Africa. **Read more:** <https://businessday.ng/columnist/article/paradigm-shift-towards-sustainable-health-financing-in-africa/>

## 10 sustainability startups selected for Ecosystem Restoration Africa programme



Run by Village Capital, with support from Moody's Foundation, the Innovation for Ecosystem Restoration Africa 2023 programme attracted applicants from 22 countries across Africa, with the final cohort comprising 10 startups sourced from Kenya, Nigeria, Sierra Leone, South Africa, Uganda and Zambia. Village Capital will provide expert training sessions enabling the startups to refine their sustainability solutions, improve their investment readiness as they prepare to scale their startups, and access the

organization's global network of investors. Three of the selected startups are based in Kenya, namely Inno-Neat Energy Solutions, an off-grid clean energy solutions provider; Octavia Carbon, which designs and builds Direct Air Capture (DAC) technology to reverse climate change and end the fossil fuel age; and Organic Fields, which collects biodegradable food waste and converts it through controlled composting into an organic fertiliser. **Read more:** <https://disrupt-africa.com/2023/08/24/10-sustainability-startups-selected-for-ecosystem-restoration-africa-programme/>

## The Zimbabwean Brands Inspiring a New Movement of Sustainable Fashion



Fashion is arguably one of the longest serving industries in the world. No matter how far you go back in history, you are sure to discover the trade of clothes, shoes or accessories. Modern day concerns of fashion are linked with its sustainable practices. Consumers are more conscious of the environmental impact the fashion industry has and are seeking more sustainable brands. Environmental sustainability is an imperative issue that the world should tackle collectively. In the fashion industry, sustainability has been closely associated with practices aiming to achieve a carbon-neutral sector based on equality,

social justice, animal welfare, and ecological integrity. This is beyond textiles and products as it incorporates the whole product life cycle—addressing how the clothes are made, consumed and disposed. Traditionally, Africa has a good track record of sustainability with numerous brands utilizing environmentally friendly materials in clothes production such as natural fibers, raffia, silk, and cotton. African textiles like Bogolanfini from Mali and Kente from Ghana are examples of eco-friendly methods in African fashion production as they are made from eco-friendly dyes.

**Read more:** <https://www.okayafrica.com/sustainable-clothing-brands-zimbabwe/>

## Firms urged to create value for shareholders through sustainability reporting

Sustainability reporting is a form of non-financial reporting that enables companies to convey their progress towards a goal on a variety of sustainability parameters including environmental, social and governance matrices as well the risks and impacts they may face now and in the future. “If we earnestly and deliberately employ ESG (environment, social and governance), we will create value for our shareholders. As highlighted before, this will result in economic development,” he said in his remarks at the CGI summer school in Nyanga on Thursday. “This year’s theme is challenging you as a governance and accountancy professional to make a marked difference in the economy of Zimbabwe through implementation of this theme.

**Read more:** [https://www.newsday.co.zw/business/article/200014878/firms-urged-to-create-value-for-shareholders-through-sustainability-reporting#google\\_vignette](https://www.newsday.co.zw/business/article/200014878/firms-urged-to-create-value-for-shareholders-through-sustainability-reporting#google_vignette)

## TIMB promotes sustainable production



THE Tobacco Industry Marketing Board (TIMB) has embarked on the promotion of sustainable production in line with the tobacco value chain that feeds into the food system transformation strategy. Tobacco production contributes significantly to gross domestic product and is the major export product in the agricultural sector. However, it has hugely contributed to deforestation, carbon emissions and contamination of water bodies. TIMB has embarked on various initiatives in acknowledgement of the negative impact

tobacco production is having on the environment. Speaking at the TIMB annual general meeting held last week, acting chief executive officer Emmanuel Matsvaire said the company held awareness campaigns in a lot of regions towards sustainability in terms of the environment and labour. Research shows that tobacco curing is contributing 16% to deforestation annually and the board is now on an accelerated drive in promoting sustainability.

**Read more:** [https://www.newsday.co.zw/agriculture/article/200015976/timb-promotes-sustainable-production#google\\_vignette](https://www.newsday.co.zw/agriculture/article/200015976/timb-promotes-sustainable-production#google_vignette)

## Climate change mitigation in Zimbabwe and links to sustainable development

Zimbabwe’s Nationally Determined Contribution to the Paris Agreement can achieve both greenhouse gas emissions reduction targets and key development aims. The authors argue that the work in Zimbabwe illustrates how methods to assess priorities for both climate mitigation and economic development can be integrated within climate change mitigation target-setting assessments. In 2021, Zimbabwe updated its target for reducing greenhouse gas emissions, moving from seeking to achieve a 33% reduction in per capita energy-sector emissions towards a more ambitious aim to achieve a 40% reduction from all sectors (compared to 2030 baseline emission scenarios). This research paper details how implementing the actions identified in Zimbabwe’s Nationally Determined Contribution (NDC) can achieve two aims: meeting the country’s updated target for greater reductions in greenhouse gas emissions, and bringing about benefits for the country’s economic development. The authors show that taking priority actions can bring about quantifiable development benefits, helping to increase biodiversity, improve public health, expand sustainable energy use, and provide greater energy security for the country.

**Read more:** <https://www.zawya.com/en/economy/africa/climate-change-mitigation-in-zimbabwe-and-links-to-sustainable-development-s3k4v1p>

## ABOUT INSAF

INSAF is an independent multi-disciplinary independent think tank and research organization working towards a sustainable Africa. The Institute is a registered Independent Trust (MA1218/2012) in Zimbabwe.

## OUR VISION

Advance Sustainability Initiatives for Africa

## OUR MISSION

Foster Sustainability Initiatives and innovations towards Green Economy, Sustainable Development and Sustainable Living through applied research, programs and technical support services and across sectors.

## OUR VALUES

- ✧ A non-partisan research institute
- ✧ An agent for change that promote transformation towards sustainability
- ✧ Committed to rigorous and objective research and analysis to support policy and decision making across sectors
- ✧ Capable of handling complex economic, environmental, developmental, and social issues honestly
- ✧ Committed to environmental sustainability principle, practices and values







## CONTACT DETAILS

Institute for Sustainability Africa (INSAF)  
Address: 65 Whitewell, Borrowdale West, Harare, Zimbabwe  
Telephone: +263 242 796 501/ 0778 357 714  
Website: [www.instforsustainafrica.org](http://www.instforsustainafrica.org)  
Email: [admin@insafrica.org.zw](mailto:admin@insafrica.org.zw)