

9 Blockchain startups contributing to sustainable development

Blockchain technology is gathering momentum as one of the next transformative technologies. Its transparency and ability to decentralise control makes it the perfect tool for driving forward sustainable development across a number of sectors.

While it emerged as a technology to decentralise finance and currencies, blockchain has gone on to have a far-reaching impact across numerous industries.

Blockchain's transparent and decentralised nature has made it incredibly popular with startups working in the sustainable development space. Information is simultaneously locked and transparent, making processes like supply chains or transactions both immutable and verifiable.

From agricultural technology to food supply chains to healthcare, blockchain offers a remarkable solution to industries seeking to restore trust and transparency. Startups have seized this opportunity of a technology with sustainability in its DNA.

David Chreng-Messembourg, a partner at investment fund Leadblock, believes this makes blockchain a worthy direction for impact investors. "This is the first time where there is a technology self enforcing those initiatives. By definition it

has to be transparent about its value chain, so you can't hide information," he says.

Leadblock earlier this year released [Enterprise Blockchain 2020](#), a report compiling data from over 200 blockchain startups. Sustainability ranks chief among the data recorded, highlighting how many of the UN Sustainable Development Goals each startup addresses.

From the survey, here are nine European blockchain startups making a sustainable impact.

IBISA

Agricultural insurance technology

In developing countries, agriculture often accounts for over a third of total gross domestic product (GDP). Countries, like those in Sub-Saharan Africa, will feel the greatest impact of adverse weather that comes with climate change, where around 500 million farmers in developing countries remain uninsured, meaning damage or devastation to crops can easily go uncompensated.

IBISA founder Maria Mateo Iborra combined her own experience of working in the satellite and space industry, with her knowledge of agriculture from her family's farm, to build a company that could facilitate insurance for these agricultural workers.

IBISA—"Inclusive Blockchain Insurance using Space Assets"—solves two key challenges that has made insurance inaccessible. Firstly, it reduces the cost of loss assessment, by using satellite data to make accurate decisions; secondly, the automated platform reduces the cost and time-consuming process which often makes micro-insurance unaffordable.

For Maria, bringing blockchain to the insurance business was a no-brainer—"Insurance is the business of trust, so all the trust and transparency components that you can bring as an insurance solution, is an added value for our customers."

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UpyaTech

Energy and logistics supply chain

1.1 billion people in the developing world live without access to electricity—600 million in Africa alone. For energy and logistics companies, it's often the costliness and mismanagement of the 'last mile' which means that provisions fall short.

UpyaTech offers a customer relationship management (CRM) system for last mile distributors (LMDs) delivering energy access, clean cooking solutions, water pumps, and communications.

“Our software is designed to be flexible, cost effective and accessible for small to medium sized LMDs. We support our clients through a full range of services including free digital assessments of their businesses, and we work hand in hand with them to help build sustainable and impactful LMD businesses,” explains Gerard Kelly, CEO and co-founder of UpyaTech.

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SmartChain

Building sustainable practices across the farming supply chain

SmartChain offers a promising opportunity to innovate and improve short food supply chains. They aim to provide a platform which connects numerous partners in the supply chain, including farmers and small food businesses, innovators and researchers, and representative organisations.

The aim is to build and improve sustainable practices across the supply chain, identifying three key areas of impact: food and nutrition security, social welfare (such as farmer's income and employment), and environmental security. The platform is already being rolled out across nine countries in Europe.

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SeafoodChain

Fish and seafood supply chain platform

While fish is not farmed or harvested on the same scale as most meat, the fishing industry still has a huge toll on the environment. It's hard to be certain about the journey and process it's taken to get to your plate, and the impact it's had.

SeafoodChain tracks the fish from water to plate— “from the first raw product producers to the logistics, the production distribution and all the way to the end consumer”, according to its website.

Each partner at every stage records accurate information through the blockchain platform about the process to help customers make more reliable decisions about the sustainability of their food.

[Discover SeafoodChain](#)

Avenews GT

Connecting agribusiness with finance

Avenews founder Shalom Ben Or grew up on a kibbutz in Israel, a self-sustaining community supported by agriculture. He always recognised the importance of agriculture for many economies.

“At Avenews, we asked what was preventing this industry from becoming more capitalised with more liquidity,” Shalom says. The problem was simple—there was a lack of data. Transactions were old-fashioned and informal, usually done through a handshake and recorded maybe through an email or a Whatsapp. This was especially true in developing countries.

Avenews aims to provide more trust and authenticity to agribusiness in developing countries in order to attract more attention from financial institutions. The blockchain driven platform enables a self-reliant ecosystem which doesn't rely on an intermediary to vouch for the validity of transactions.

A better-funded agricultural system will have a great impact on the environment, meaning that farming is sustainable and protected, while helping to purchase environmentally-friendly products.

Meditect

Pharmacy and medicine verification platform

Falsified medicine presents one of the biggest challenges in the delivery of healthcare in developing countries. In Africa, the majority of medicine is imported, while two-thirds of medicine is bought informally on the street. Unverified medicine can be lethal, and causes hundreds of thousands of deaths every year.

Certified medicine, meanwhile, is often redirected by African distributors to the more profitable European online market, causing a drought of products.

Meditect applies blockchain in a way that makes medicine traceable and verifiable, linking patients to pharmacies and manufacturers. The blockchain platform uses serial numbers on medicine to make sure that medicine's origins can be tracked and verified, to break the corrupt process.

Discover Meditect

Foodgates

Europe-to-China food importing platform

China is the largest consumer market in the world, and given its demand for European produce, remains a very lucrative opportunity which is hard to ignore. Yet as with many other business and industries, China is hard to penetrate from the outside, with a host of laws and compliance regulations that makes the exporting process complicated.

Foodgates, launched by blockchain conglomerate VeChain, aims to bridge this gap between Chinese buyers and Europe suppliers, currently focused on the French market.

"The immutability of public blockchain coupled with verifiable information makes this solution really unique," VeChain COO Kevin Feng says.

Connecting Food

Authenticating and tracing food from supplier to buyer

Consumers increasingly want to know where their food is coming from. It can't just taste good: we want to know where it's been transported from, and has it been produced ethically and sustainably.

Connecting Food has traced this trend in consumers, citing that 86% of consumers want more transparency from food brands. Using blockchain, the platform records information at each stage of the food supply chain process to make sure that brands, and consumers, can be sure of where their products come from.

[Discover Connecting Food](#)

CyStellar

Satellite data-driven insights for insurance, agriculture, and food

Insurance, agriculture, and food are all industries which demand trust and authenticity, particularly after historic scandals which have rocked these established worlds.

UK-based startup CyStellar, as its name would suggest, buys into the power of space in making good decisions. Using an interconnected technology of satellites, drones, ground sensors, and enterprise software, CyStellar delivers stronger data to insurance, agriculture, and food companies to help drive their decision making.

Across a series of products, CyStellar has offerings including an agtech service to help farm management, to an insurtech platform to protect businesses from adverse environmental conditions and changes.

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