Sustainability Tech

A Company Outline

About us

Sustainability Tech develops technology solutions for clients that require real-time landscape management data. Our company combines a suite of proprietary IoT sensors and software to provide a comprehensive solution for monitoring large forest, wetland and plantation areas. We provide environmental data and automated reporting for clients, helping them better understand the impacts of their interventions, reduce the risk of fire and report outcomes more accurately.

With offices in Jakarta and Bali, Sustainability Tech deploys technology for international NGOs and project developers, drawing on an extensive professional network in the fields of conservation, forestry, agriculture, fisheries, and scientific research.

Our Mission

Food security, climate change, biodiversity loss are but some of the critical issues facing the planet today. We at Sustainability Tech believe that technology not only will but must play a major role in meeting the global challenges ahead. Pressure is mounting on companies and governments to move away from the business as usual approach to production and growth. From a model where—historically—the inherent value of ecosystems and nature has been largely ignored. Sustainability Tech wants to be on the front lines providing the capacity for improved management through technological innovation and a drive to make significant positive change towards profitable, equitable, transparent and sustainable land use.

Maintaining a sustainable productive planet and conducting profitable business does not need to be mutually exclusive. Without private sector involvement, investment and commitment to sustainable practices, the already daunting planetary challenges ahead will likely continue to grow unabated. Whether small-holder or big player, our mission is to bring the principles of big data to areas and sectors that are lagging behind in technological innovation and yet are likely to benefit the most from data driven solutions. Sustainability Tech is aiming to be the world leader in developing the systems to deliver these solutions.

Products & Services

All rural landscapes—especially in the tropics—present their own unique challenges when it comes to developing and deploying technologies. Harsh conditions and varying levels of infrastructure or varying quality and capacity means that a one size fits all approach is unlikely to be successful. Our solution is to offer custom built, project specific systems for our clients. Our systems are modular. We combine a number of different elements to put together a bespoke solution for our customers whilst maintaining cost effectiveness.

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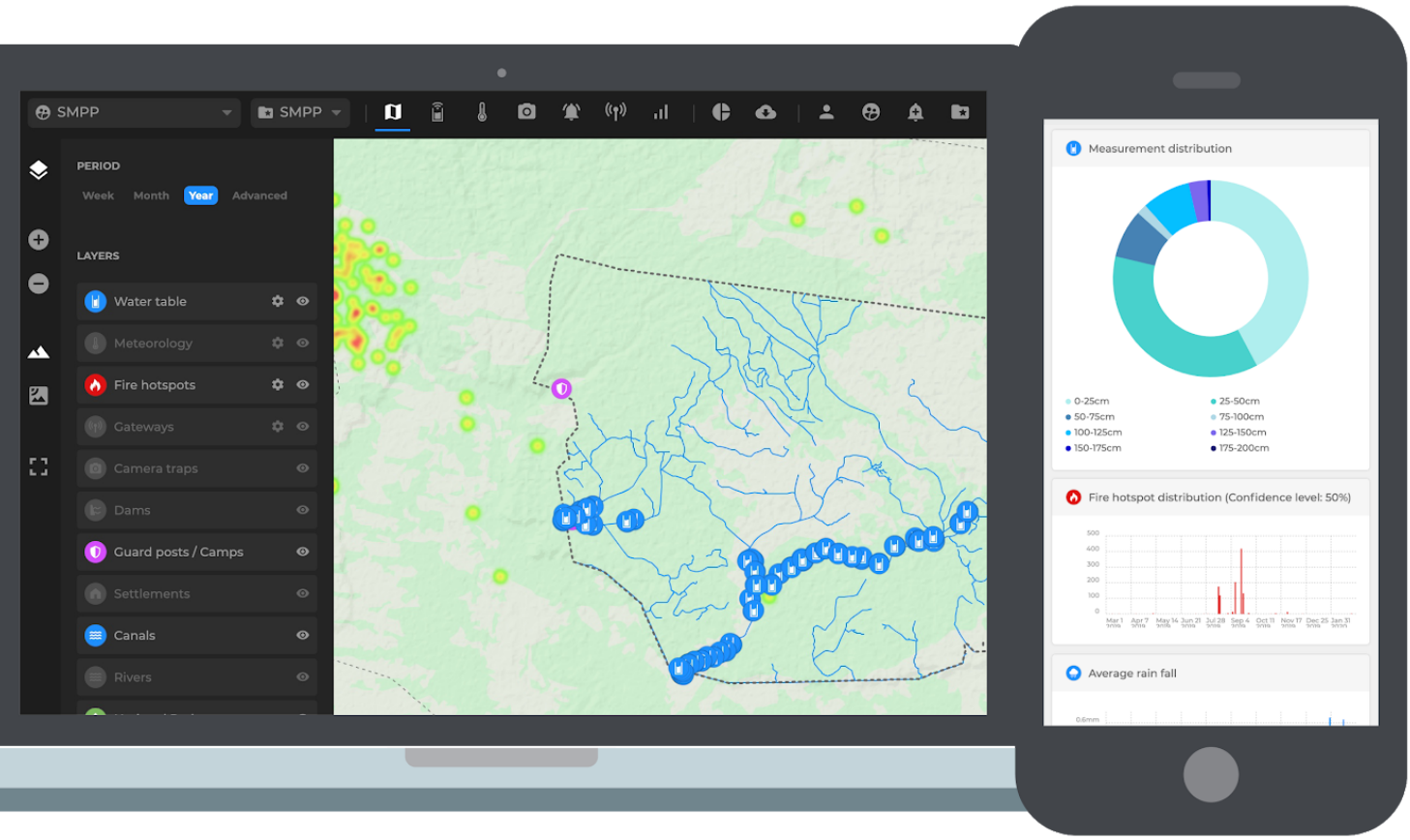
THE DASHBOARD

Watch the state of your project on any device when you want it. A single source for all your data.



Features

Customizable reports with PDF export

User configurable notifications to email and push

Map view with extensive custom layers

Near real time fire hotspot, water level and meteorological data aggregation

Sensor cluster grouping for data comparison

API export to third party applications

Easy import of datasets for existing projects

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MICROHUB WITH SMARTHYDRO

Bring real-time water level measurements to the most remote places on earth for an affordable price

Features

Fully inhouse built
Send messages over 5-10KM (terrestrial) or anywhere in the world via Low Orbit Satellites
Use LoRaWAN advanced encryption technology for optimal security (EAS-128)
Single integrated unit for easy installment and operation
Up to 3 year battery life or more than 10 years on our cutting edge plant powered batteries
Heavy duty enclosure for challenging environments

* Range is based on the landscape
* Battery life depends on transmission interval
* Read our FAQ document for more information on how the IoT system works

Current projects

Sustainability Tech currently has two contracted pilot projects in Indonesia focusing on reducing emissions in the agriculture and forestry sectors. Between them there are 150 SmartHydro sensors sending real time data on water tables in remote landscapes covering 50,000 ha . Both projects are focused on rewetting degraded peat ecosystems to reduce fire incidence and stop ongoing degradation.

South Sumatra: Our project in South Sumatra is a nature-based solutions project verified and validated under joint VCS and CCB standards. The project is reducing emissions from peat degradation and has successfully brought carbon credits to market. Sustainability tech has provided a suite of sensors and a project management dashboard to ensure effective management and transparency in reporting. Helping make the project become one of the premier NBS projects in the region.

Riau: Our Riau project is in cooperation with a large international NGO funded out of the USA. The project is focused on oil palm landscapes, which works closely with local communities on peatland restoration. Using our SmartHydro sensors we are developing predictive models on the impact of rewetting degraded peat that will ultimately guide management decisions around canal blocking and maximizing emissions reductions.

Our advantages

Cost competitiveness: One of the key reasons why technological solutions have remained out of reach for many in the sector is the perceived low ROI on what is often over-priced and underserviced. This is particularly true in the emerging markets of the global south where buying power is often low and there is a reticence to invest capital in new systems. Our business model is simple. We design and build hardware that is fit for purpose. By using a Low Cost High Tech (LCHT) model we are able to leverage the fact that Indonesia is growing into one of the most connected countries, with ever expanding network access even in the most remote parts of the archipelago.

Local knowledge: Our founders have lived and breathed the Indonesian environmental and agricultural sector, with over 15 years combined experience. The old adage that one size doesn't fit all is particularly evident in such a diverse and complicated country as Indonesia. Where other companies may see this as a risk we see it as an opportunity. This is why Sustainability Tech builds modular project/programme specific tech ecosystems. We work closely with our clients to ensure their needs are met in the most cost efficient and sustainable way with a good understanding of the legal, business and environmental policy environments.

Network Connections: Our founders have developed a large professional network of leading NBS project developers, agribusiness leaders, national and international NGOs, research organizations, engineers and politicians. Having pick up the phone access to such a diverse range of sector interests gives Sustainability Tech a large leg up. We aim to continue leveraging these relationships and direct them towards understanding and implementing better systems. Together with our relations we hope Sustainability Tech can become a market leader. We are currently in talks with two large international NGOs and an Agribusiness leader about deploying at their project sites.

The people

SEBASTIAN PERSCH
Co-founder

Sebastian strongly believes that recent technological advances need to be and should be made available for sustainability practitioners —in particular smallholder farmers— in order to make the entry into sustainable certification easier, more transparent and less costly. Without technological innovation in these areas, truly sustainable tropical landscapes will remain out of reach.

With over 7 years of research experience in tropical peatlands, oil palm production, climate change mitigation as well, consulting on advanced data analysis and statistical programming for forest conservation projects across Southeast Asia, Sebastian understands the complexity of tropical landscapes and thus sees the need for improvement of smallholder certification schemes across agricultural commodities.

JOSH VAN VIANAN
Co-founder

Josh strongly believes in the potential of technological solutions to engender equitable, transparent and sustainable landscapes. Through providing simple and knowledge driven applications, better engaged stakeholder communities can be empowered to contribute towards higher sustainability standards and certifications for the benefit of both local people and the environment.

With an academic background in ecology and biodiversity conservation, and more recent academic pursuits researching integrated landscape approaches in the tropics, Josh brings with him a unique set of skills, ideas and experiences required to build integrated and multi-faceted systems for making positive change in complex forested landscapes of global social and ecological importance.

ROY NIELS
Co-founder

Roy strongly believes that there are still great steps to be made in bringing technological solutions to the field of sustainability. Where companies working in these fields might not always have the technical know-how to streamline these processes, he thinks that Sustainability Tech can make a significant difference and raise the field of sustainability to a new level.

With a 15+ years working experience programming mainly web applications, he knows what it takes to automate complex systems. He has worked for renowned clients all around the globe and has been leading projects that not only expected technical knowledge but also creative solutions where time constraints were high. He is fluent in a multitude of programming languages and is always looking for technical solutions to optimize products, being it software based or hardware oriented.

ISTI HANIFAH
Policy, Legal and Finance

Isti has over 12 years' of experience in regulatory design and implementation for state asset management in Indonesia with specialization in sustainable financing and environmental policy. Her areas of focus include sustainable natural resources management and conservation, institutional development, policies, and financing, public sector strategy and community engagement.

Before joining Sustainability Tech, Isti worked for Indonesian Ministry of Finance and was a certified government's non-attorney representative at court and a public bailiff.

MADE WEDA MAHARTA
Hardware/Software developer

As part of his internship for the Bali State Polytechnic Weda has joined Sustainability Tech to help with current hardware and work on new cutting edge IoT devices that will be the new generation of field devices that collect real time data.

Weda is building (prototype) hardware and programming in low level programming languages like C and C++ to make sure our sensors give back the most accurate results.