



SWISS ALPS
MINING

Executive Summary

Swiss Alps Mining & Energy

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Date

April 08, 2018



The smart mining company

Swiss Alps Mining & Energy

The blockchain community worldwide faces strong headwinds due to the very energy-intensive mining process of crypto currencies and blockchain-based business applications. At the same time, in the Swiss alps, thousands of unused structures are disintegrating.

Swiss Alps Mining & Energy connects these two worlds by offering environmentally friendly mining facilities in unused buildings in the Swiss alps, powered by renewable energy only.

Swiss Alps Energy AG (SAE) provides decentralized blockchain infrastructure and mining facilities by means of a sophisticated modular cube system. The pre-fabricated cubes contain the mining components and are installed on-site in unused buildings in the Swiss alps. They allow for ecologically sound and highly efficient mining.

With the help of an Organic Rankine Cycle (ORC) system, energy consumption will decrease by up to 50% in comparison to similar installations. The ORC system uses the waste heat that is generated by the mining process in order to recover energy. SAM Cubes are located at high altitude, which facilitates the process of energy recovery, as altitude lowers the boiling point of water. No additional air conditioning systems are needed.

Swiss Alps Energy AG is the first company worldwide to use an ORC system to recover energy from waste heat from mining facilities. SAE therefore offers an effective solution to a global mining problem. In addition, SAE customers have the option to join SAM Smart Mining, also referred to as samaiX®. SamaiX is SAE's proprietary artificial intelligence and a Decision Support System that helps miners to optimize their operations.



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The blockchain community worldwide faces strong headwinds due to the very energy-intensive mining process of crypto currencies and blockchain-based business applications. At the same time, in the Swiss alps, thousands of unused structures are disintegrating due to the fact that today's spatial planning law does not allow for residential use of these buildings.

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Swiss Alps Energy AG will hold an Initial Coin Offering (ICO) in early 2018. The funds raised in the ICO will be used to finance the development and expansion of the mining facilities and to acquire holdings in hydropower plants. The SAM token, Sam, is an ERC20 token. It can be used as means of payment within the SAE mining and service universe and will be tradable outside the SAM platform on all relevant exchanges.

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The decentralized distribution of the various facilities allows SAE to offer equally decentralized hosting of individual company blockchains and enables SAE to rent out these infrastructures.



A sophisticated modular cube system allows us to build and implement prefabricated dust-protected mining components on-site

Swiss Alps Energy AG (SAE) – the company

Swiss Alps Energy AG (SAE) is Swiss Alps Mining & Energy's operating business. Members of the team come from fields such as blockchain technology, crypto currency mining and hyperledger applications developers and specialists, as well as civil engineers, infrastructure engineers, and energy experts. The team has successfully developed and launched several products, solutions and applications based on the blockchain technology. The company is currently going through the application phase in order

to become a member of a Swiss self-regulatory organization (SRO).

Swiss Alps Energy AG is a distributed ledger-based energy supplier and an operator of flexible modular mining infrastructures that are intended for long-term stationary use. Thereby, SAE preserves the aforementioned unused buildings in the Swiss alps and uses them sensibly and without interference with either building structure or the environment.

SAE concept

Out of its unique position as an experienced Swiss provider of blockchain technology and hyperledger-based business applications, Swiss Alps Mining & Energy strives to:

- promote blockchain technology and its uses to a broader public
- provide clients/third parties the decentralized infrastructure to develop their own blockchain-based projects
- address environmental issues associated with crypto mining worldwide
- support the local economy in Swiss alpine areas and facilitate the digital transformation in these areas
- be an electricity supplier using the distributed ledger technology

SAE cubes

A sophisticated modular cube system allows Swiss Alps Energy AG to build and implement prefabricated dust-protected mining components on-site. Ide-

al natural temperature conditions enable easy cooling of the mining facilities, and the Organic Rankine Cycle (ORC) system – still in its project phase – leads to a reduction in energy consumption of up to 50% in comparison to similar installations. The flexible and modular mining cubes provide cutting-edge automation and require little maintenance. The individual cubes communicate with the central management platform, which in turn monitors the cubes and assigns to each cube the optimal parameter in order to maximize mining for maximum profit.

SAE will rent out entire cubes or individual mining capacities from the SAM Cubes – while at the same time guaranteeing highly energy efficient and cost competitive mining. SAE will also give competitors and/or individual persons the possibility to rent mining facilities, and the power needed can be paid in SAM tokens. Customers may also purchase cubes for their own use. Companies or individuals who purchase a cube, can obtain the necessary power from SAE and operate the cube on SAE's premises, or deploy the cube elsewhere.

SAE potential

Switzerland, a safe country with high environmental standards set in place, is growing into the center of blockchain technology. Due to a good and cheap supply of renewable energy, Switzerland is a very attractive location for mining facilities as profitable mining is possible. Market acceptance of crypto currencies and blockchain technology is steadily increasing. Mining farms are rapidly growing, and renewable energies are gaining ground. Renewable energy can be sold abroad and enjoys high market acceptance. Thanks to the steady growth in the use of blockchain technology worldwide, energy consumption for mining will continue to increase. This provides interesting opportunities for providers of mining facilities and for power producers.

SAE energy

Swiss Alps Energy AG uses renewable energy only. Long-term whole-sale purchasing agreements and the management of the company's own small hydro-power plants allow for a highly profitable operation of the mining facilities. This is especially significant since energy costs account for a major part of the total cost of crypto mining, and traditional mining facilities predominantly use dirty fossil energy sources. We are convinced that the next generation of electricity grids will be smart and flexible. Through the decentralized grid, they will be fed by private renewable energy providers as well. Such a decentralized network is based on smart metering hardware, smart agents, smart applications that negotiate the optimal tariffs through artificial intelligence, and smart contracts that mirror these contracts in a transparent and secure manner. We are quickly moving towards Industry 4.0, and dealing with automation, artificial intelligence and smart contracts will become commonplace. As an electricity supplier, Swiss Alps Energy AG will expand its services in the near future and penetrate into other business segments using the distributed ledger technology.

*Thousands of unused alp huts.
Many are desintegrating because
of unusing.*



SAE future

Swiss Alps Energy AG provides the foundation for many future-oriented applications: financial asset custody and transfer, product tracking through blockchain and IoT in logistics and transportation, electronic records in healthcare, and identity management to simplify the KYC process for any conceivable industry are just some examples of how distributed ledger technology can be used. In addition, SAE has developed a sustainable concept to address the disintegration of cultural assets in Alpine areas, while at the same time supporting their economy and digital transformation.



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