

5. Discussion

The Bitcoin green mining technologies have been analysed and the conclusion from this is that green energy as well as cryptocurrency green mining is important topic to discuss. Green mining covers such topics as pollution and huge power consumption. Sustainable energy as a power source for a mining rig can solve these problems. Renewable energy will cut the CO₂ pollution, make the environment better.

The profitable model and exemplary setup suitable for SME-s having solar harvesting panels have been elaborated in this work. Solar system is a great and useful way to generate solar, renewable energy from sunlight. The use of the energy may be diverse. Solar energy can power from home appliances, such as kettle, power sockets and others, to, for example, a mining rig, as it was described before. And when there is no sunlight outside, accumulated with solar energy batteries will be used as a power source.

The economic calculations have been made by exemplary setup. It showed that sustainable energy can be used without any issues as a power source for mining rig. As calculation shown, it takes 33 months to recoup the rig and solar system setup. Without the solar system it will take 18 months to recoup only mining rig. However, if the environment damage is considered, it will be way better to use sustainable energy affecting in a positive way environment and other people as well.

The topic is promising for the future economy, as allows SME-s especially in rural areas benefit from solar energy use in conditions of excess of energy. There is a huge benefit of excess solar energy left over from production. Firstly, it can be stored in batteries for future use when there will be no sunlight. Secondly, the energy excess can be sold back to utility company which gives motivation to private clients and smaller companies to run their own sustainable energy generation.