

# **Project Work - Crédit Agricole & BlockInvest**

MasterZ - 4° Edition Italy

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# 1. The Team: Satoshi Squad



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## 2. Executive summary

The Decentralized Energy Community (DEC) aims to create a low-cost, zero-carbon power system that is owned by individuals and communities worldwide. The DEC aims to reduce dependence on centralized energy networks and promote the use of renewable energy sources. The DEC will develop a peer-to-peer energy trading platform that uses blockchain technology to enable secure and transparent transactions. The DEC will leverage the unique features of the Polygon blockchain and ERC20 tokens to provide a seamless and secure experience for stakeholders.

Implementing a new energy token system using the Polygon blockchain and onchain.ID in the Italian market presents legal hurdles and adoption issues. The DEC must comply with the complex regulatory framework for energy markets in Italy, including authorization and compliance with multiple national and European Union laws, regulations, and policies. The DEC may require approval from regulatory bodies such as the MiFID II, ARERA, ESMA, and FATF Recommendations. The adoption of a new energy token system using blockchain technology requires a high level of awareness among energy stakeholders. Many stakeholders may not be familiar with blockchain technology or the benefits of using a new energy token system.

The project aims to raise money in FIAT through VC funds, and the token will be used to buy and sell energy on the platform. Tokens will be minted by energy producers for every kWh they decide to sell on the platform.

Benefits of the project include enabling individuals and communities to trade renewable energy directly, increasing transparency and security, better grid management, improved energy analytics, and increased access to renewable energy.

Overall, the Decentralized Energy Community project seeks to promote sustainability, reduce carbon emissions, and contribute to the global effort to fight climate change.

### 3. Use case analyzed

The use case being analyzed is the Decentralized Energy Community, which is aiming to establish a resilient, low-cost, zero-carbon power system owned by people globally. The project aims to create a decentralized and transparent platform for energy trading that enables peer-to-peer transactions of renewable energy, grid management solutions, and useful analytics to manage energy consumption.

The goal is to empower individuals and communities to take control of their energy consumption, reduce dependence on centralized energy networks, and contribute to the global effort to reduce carbon emissions and fight climate change.

The main challenges are the technical expertise, competition with traditional energy providers, regulation, adoption and scalability.

### 4. Is there a secondary market?

Consumers who have purchased tokens on the platform can choose to sell any unused tokens on the secondary market to other consumers who are interested in buying energy. The tokens will represent a certain amount of energy, and their value will depend on the average price of energy on the platform, as determined by the producers who are offering energy for sale. The DEC will likely need to ensure that the secondary market is transparent and fair for all participants in order to maintain trust and confidence in the platform.

To do so, we would need to create a liquidity pool for our token and a compatible token (such as Ether), which would enable users to trade our token for the other token. The process for creating a liquidity pool can vary depending on the DEX, so it's important to research the specific requirements for the DEX we want to list.

Listing the token on a Decentralized Exchange (DEX) can provide several benefits for our project:

- **Increased liquidity:** By listing our token on a DEX, we increase the number of places where people can buy and sell our token which can lead to increased liquidity.
- **Decentralization:** DEXs are non-custodial, which means that users retain control of their tokens and there is no need for a central authority to manage the exchange. This aligns with the core philosophy of blockchain technology and can help increase trust in our project.
- **Exposure to new users:** Listing on a DEX can help us reach a wider audience of cryptocurrency traders who may not be active on centralized exchanges. This can help drive the adoption of our token and increase awareness of the DEC.

- **Lower costs:** Listing fees for DEXs are generally lower than those of centralized exchanges, which can be especially beneficial for smaller projects with limited budgets.

Overall, listing our token on a DEX can be a good way to increase the visibility and adoption of the DEC in a decentralized and cost-effective manner.

It's required that the users must sign up for our platform when they want to spend the tokens they purchased on a DEX. This can help us to be compliant with any regulatory requirements we may have, such as anti-money laundering (AML) and know-your-customer (KYC) rules. When a user wants to spend their tokens, they would need to sign in to our platform and confirm the transaction, which would then be executed on the blockchain.

It's worth noting that requiring users to sign up for our platform could reduce the number of potential buyers of our token, since some users may not want to go through the sign-up process. On the other hand, requiring sign-up can also help us build a stronger community and establish better relationships with our users, which can be beneficial for the long-term success of the DEC.

## 5. Why use Blockchain technology?

- **Is there a predictable, repeatable process that lends itself well to automation?**  
The trading process is generally very automatable, as it is already done in the stock market, matching engines are fast and efficient for real-time pricing of an asset based on the current supply/demand for that particular asset.
- **Is there an ongoing or long-running transaction or process, rather than a process that only occurs once?**  
In our case the transactions are single transactions, in each of which tokens are exchanged, this can be automated periodically based on estimated consumption, based on a fixed monthly threshold (similar to a subscription) or, finally, in a synchronous mode of real-time purchase relative to consumption.
- **Are there multiple stakeholders in this process or value chain?**  
The main stakeholders are energy consumers, energy providers (infrastructure owners), and energy producers. *For more details see chapter 10.*
- **Is there an element of value transfer? Remember, value is not only monetary.**  
Clean energy is transferred between actors through our token. People will be able to choose who they want to buy energy from and define the price.
- **Is there value in an immutable record? Or is an immutable record a requirement?**  
Yes, since we must be able to trace back who sold energy to who to avoid fraud. Reliability and transparency are the foundation of our solution since we must guarantee that green energy is 100% produced by renewable sources.

## 6. Technological solution

### What blockchain network are you using for your use case and why?

After a comprehensive evaluation of various blockchain solutions, considering key factors such as speed, cost, and security, it was determined that the best fit for our project was **POLYGON**. This Layer 2 solution for Ethereum offers compatibility with existing Ethereum infrastructure and tools while providing fast transactions, low costs, and added security through its unique architecture and Proof of Stake consensus mechanism. While Solana was also evaluated, the decision was ultimately made to choose POLYGON due to concerns about Solana's reliability and its recent history of service disruptions.

### Onboarding process of the stakeholders

Onchain.ID is a digital identity platform that enables users to manage their identities on the blockchain. The platform allows individuals to own, control, and share their identity information in a secure and decentralized manner.

Onchain.ID provides a REST API that can be integrated with our applications and systems to enable secure digital identity management. The API allows for easy integration with web and mobile applications, making it a flexible solution for different use cases.

Decentralized Energy Community will follow these steps for their stakeholders:

1. Create an account on the Onchain.ID platform and obtain API credentials.
2. Integrate the Onchain.ID API into our onboarding system.
3. Our stakeholders would need to register for an account on the Onchain.ID platform and complete the identity verification process.
4. Once verified, the stakeholder's digital identity can be used to authenticate their access to our service.
5. Onchain.ID provides various identity verification methods, including document verification, facial recognition, and biometric authentication, to ensure the security and integrity of the user's digital identity. The platform also supports different blockchain networks, including Ethereum, Binance Smart Chain, and Polygon, to ensure interoperability and scalability.

Using Onchain.ID for the onboarding of our stakeholders can help us to streamline the process and reduce the risk of identity fraud. It provides a secure and decentralized way to manage and verify digital identities, making it an ideal solution for businesses operating in a digital environment.

### Token standard

Our solution requires a Token to represent an amount of energy, which must be fungible, therefore we have chosen the ERC-20 Token Standard. This standard provides a blueprint for creating fungible tokens on the Ethereum network, making it suitable for organizations and tech companies to develop custom tokens with specific utilities such as voting rights

and reward mechanisms. All ERC-20 tokens must implement a standard set of core functionalities, such as *TotalSupply*, *BalanceOf*, *Transfer*, *TransferFrom*, *Approve*, and *Allowance*, ensuring interoperability and compatibility with various Ethereum-based services. Additionally, the standard supports optional functions, like *Token Name*, *Ticker Symbol*, and *Divisibility*, to enhance the token's usability. The ERC-20 Token Standard has proven to be the foundation for various successful cryptocurrencies, including ChainLink, Dai, and Basic Attention Token.

## The main benefits of your solution?

The main benefits of our solution are

1. **Turning electricity into a bargaining chip** - Our solution allows the transformation of electricity into a valuable and tradeable asset (from an illiquid asset to a liquid asset), making it easier for individuals and businesses to exchange energy more efficiently and cost-effectively.
2. **Fungibility** - The ERC-20 Token Standard used in our solution makes the energy tokens fungible, meaning each token is interchangeable with another and can be easily traded with other tokens that follow the standard.
3. **Interoperability** - ERC-20 tokens are compatible with various Ethereum-based services, making it easy to integrate with existing systems and infrastructure.
4. **Cost-effectiveness** - Our solution enables individuals and businesses to trade energy without having to go through intermediaries, which saves time and reduces costs.
5. **Accessibility** - Our solution provides an easy and accessible way for individuals and businesses to trade energy, regardless of their location or technological expertise.

## What kind of resources do you need?

For our solution, we need technical resources. We require mini PCs such as Raspberry Pi or similar single-board computers to connect to energy meters. These devices are low-cost, low-power consumption, and have the necessary capabilities to connect and collect data from energy meters.

On the human side, we don't need technicians, users can self-install these devices and configure the software in a few minutes.

## Programming languages used

The programming languages used for the implementation of our solution are likely to include Solidity for smart contract development and JavaScript or Python for backend and web development. These are popular languages in the blockchain and Ethereum ecosystem and provide the necessary tools and resources for building decentralized applications.

# 7. Security tokens compliance

## Legal compliance

Italian legislation on renewable energy communities is contained in Article 42-bis of the Milleproroghe Decree 162/2019 (converted by Law No. 8/2020 of February 28, 2020)<sup>[1]</sup>. This law provides for the possibility of creating communities that exchange energy for collective self-consumption, either instantaneous or deferred<sup>[3]</sup>. In addition, the Italian legislation also increases the categories of entities eligible to join energy communities, such as religious and research organizations and farms<sup>[2]</sup>. Currently, according to Legambiente's Renewable Communities 2021 report, 20 renewable energy communities are active or being activated in Italy based on the current legislation<sup>[1]</sup>. The investment aims to have 2,000 MW of new power generation capacity installed through configurations such as energy communities and collective self-consumption systems<sup>[2]</sup>. In addition, economic subsidies due to shared energy are provided for in Italian regulations<sup>[2]</sup>. To look at the future of energy communities in Italy, it is necessary to consider the experience and local vanguards that have already demonstrated the potential of reducing dependence on traditional sources.

## Token compliance

In Italy, the issuance of utility tokens for energy exchange is subject to ordinary VAT rules<sup>[4]</sup>. However, there is currently no legal framework in place for exchanges dealing with non-financial crypto-assets<sup>[4]</sup>. Each token must be analyzed case by case to determine whether it is a financial instrument under Italian law<sup>[5]</sup>. Generally, the Italian fiscal authority considers utility tokens to be exempt from securities regulation if they are used to provide access to a specific product or service that is typically provided using a distributed ledger technology platform<sup>[6]</sup>.

In Italy, the regulation of crypto-assets is subject to the general rules of the Revised Markets in Financial Instruments Directive EU 2014/65 (MiFID 2). Some stablecoins can be classified as "electronic money tokens" under this definition. Crypto assets that qualify as "financial instruments" under MiFID 2 are subject to anti-money laundering legislation and must be registered with Italian authorities.

### **MiFID II**

The Markets in Financial Instruments Directive II (MiFID II)<sup>[7]</sup> is an EU financial markets legislation that took effect in 2018<sup>[8]</sup>. It places restrictions on inducements paid to investment firms or financial advisors by any third party concerning services provided<sup>[9]</sup>. It also sets out the authorisation requirements for investment firms, including detailed information that firms must provide to the relevant national regulator<sup>[10]</sup>. Additionally, it requires organized trading of financial instruments to shift to multilateral and regulated trading platforms or be subject to transparency requirements when traded over-the-counter (OTC)<sup>[7]</sup>.

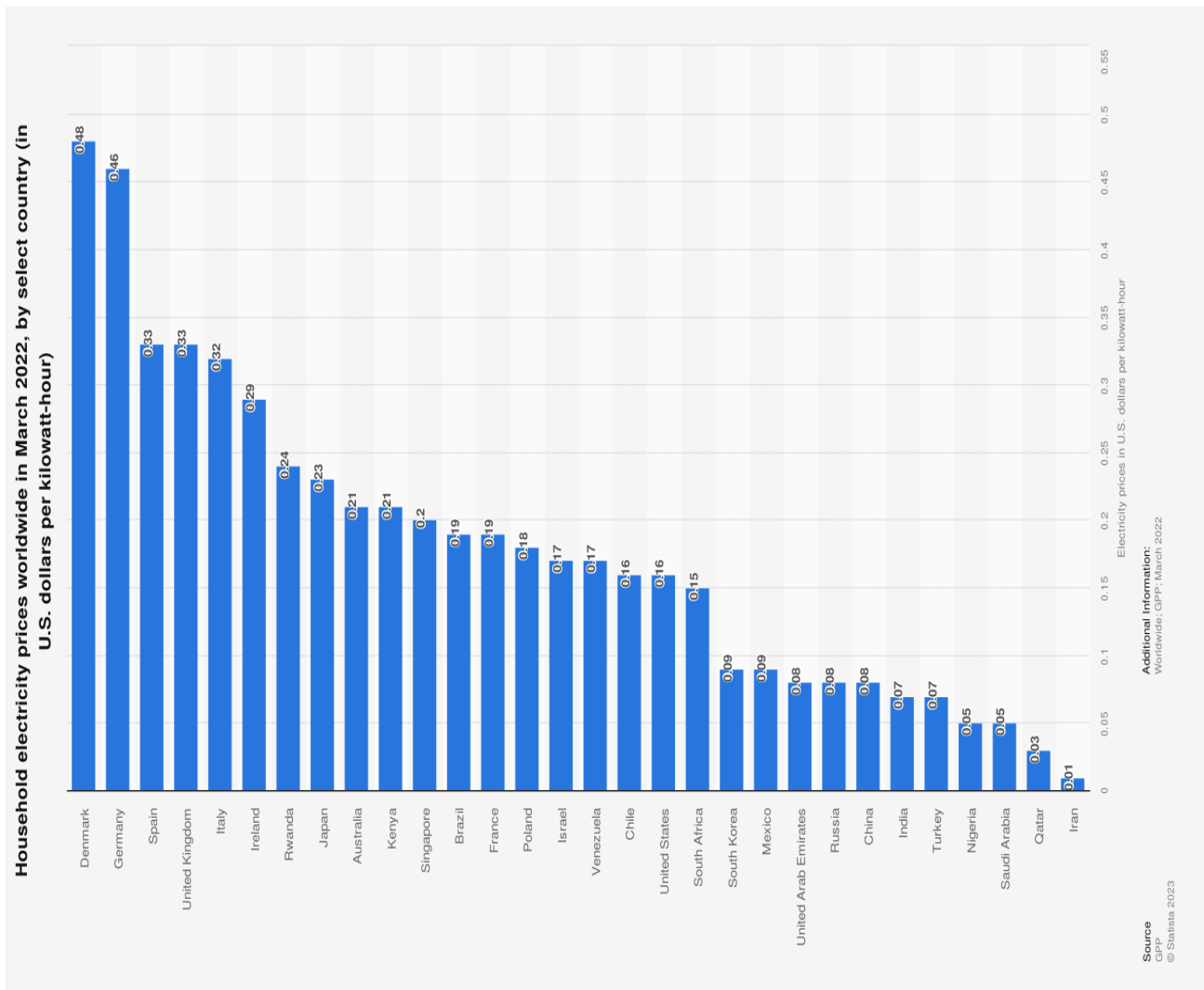
## 8. Market Sizing

This analysis will help estimate the Total Addressable Market (TAM), Service Addressable Market (SAM), Service Obtainable Market (SOM), and Launch Addressable Market (LAM) of Decentralized Energy Community (DEC)'s solutions in Italy.

### **Total Addressable Market (TAM)**

The Total Addressable Market (TAM)<sup>[1]</sup> is the total revenue potential of a market. To estimate the TAM of the Decentralized Energy Community (DEC) in Italy, it is necessary to consider the entire energy sector in the country. According to data from Eurostat, Italy consumed approximately 143,923 Gigawatt-hours (GWh) of electricity in 2020. Based on this data, the estimated TAM for Decentralized Energy Community (DEC) in Italy is around \$46 billion, assuming an average price per kilowatt-hour (kWh) of \$0.32<sup>[1]</sup>.





## Service Addressable Market (SAM)

The Service Addressable Market (SAM) is the portion of the TAM that the Decentralized Energy Community (DEC) can realistically target with its solutions. To estimate the SAM, it is necessary to consider the portion of the energy market in Italy that could be impacted by the Decentralized Energy Community (DEC)'s solutions, such as peer-to-peer energy trading, grid management, and energy analytics. Based on market research, it is estimated that the SAM for Decentralized Energy Community (DEC) in Italy could be around \$23 billion, representing approximately 50% of the total energy market.

## Service Obtainable Market (SOM)

The Service Obtainable Market (SOM) is the portion of the SAM that the Decentralized Energy Community (DEC) can realistically capture with its solutions. To estimate the SOM,

it is necessary to consider factors such as the Decentralized Energy Community (DEC)'s market share, competition, and distribution channels.

**Market share:**

- The company's brand recognition and reputation in the market.
- The company's existing customer base and loyalty to the brand.
- The company's ability to differentiate its products or services from competitors.

**Competition:**

- The number and strength of competitors in the market.
- The price competitiveness of the company's products or services.
- The level of innovation and R&D investment by competitors.

**Distribution channels:**

- The company's ability to reach potential customers through multiple distribution channels.
- The efficiency and effectiveness of the company's distribution network.
- The degree of control the company has over the distribution channels.
- Other factors that can impact the SOM and LAM include macroeconomic factors such as regulatory changes, demographic shifts, and technological advancements.

Based on market research, it is estimated that the Decentralized Energy Community (DEC) could capture around 10% of the SAM in Italy, representing an estimated revenue potential of \$2.3 billion.

## **Launch Addressable Market (LAM)**

The Launch Addressable Market (LAM) is the portion of the SOM that the Decentralized Energy Community (DEC) can realistically target in the short term with its solutions. To estimate the LAM, it is necessary to consider factors such as the Decentralized Energy Community (DEC)'s current market position, resources, and market development strategies.

- **Current market position:** This factor refers to where the company currently stands in the market. Are they new entrants or established players? Are they market leaders or followers? Understanding the company's current market position can help determine its ability to capture market share and compete effectively.
- **Resources:** This factor refers to the resources a company has available to achieve its goals. This can include financial resources, human resources, technology, and

intellectual property. Understanding a company's resources can help determine the feasibility of its market development strategies and its ability to execute its plans.

- **Market development strategies:** This factor refers to the methods a company uses to enter or grow in a market. This can include product development, partnerships, mergers and acquisitions, and marketing and advertising campaigns.

Based on market research, it is estimated that the Decentralized Energy Community (DEC) could target approximately 5% of the SOM in Italy in the short term, representing an estimated revenue potential of \$0.115 billion.

In conclusion, the estimated TAM for Decentralized Energy Community (DEC) in Italy is around \$46 billion, with a SAM of \$23 billion, a SOM of \$2.3 billion, and a **LAM of \$0.115 billion**. *These estimates are based on market research and should be considered rough estimates and subject to change as market conditions evolve.*

## 9. Analyzing the competitive landscape

The energy market in Italy is highly competitive, with several established players providing solutions in the energy sector. The Decentralized Energy Community (DEC) faces competition from both traditional energy companies and new market entrants.

- **Competitors in Italy:** Some of the potential competitors for the Decentralized Energy Community (DEC) in Italy include Enel, A2A<sup>[1]</sup>, and Terna<sup>[1]</sup>. These companies have established market positions, strong brand recognition and they offer a wide range of energy solutions.
- **Competitors in Europe:** Beyond Italy, Decentralized Energy Community (DEC) may face competition from other European companies, including EON<sup>[2]</sup>, RWE<sup>[3]</sup>, and Innogy. These companies have extensive operations across Europe and offer a wide range of energy solutions, including renewable energy and energy management solutions.

**Differentiation:** To compete with established players in the energy market, the Decentralized Energy Community (DEC) will need to differentiate its offerings through the use of innovative technology and a focus on providing low-cost, low-carbon energy solutions<sup>[4]</sup>.

**Market Position:** Decentralized Energy Community (DEC) is still a relatively new player in the energy market, and it will need to establish its brand and position in the market to effectively compete with established players.

**Decentralized Energy Community (DEC)** *can potentially collaborate with Enel<sup>[5]</sup>, A2A, and Terna<sup>[6]</sup>.* Collaboration with established players in the energy market can provide several benefits, such as access to established customer bases, increased market reach, and access to complementary resources and expertise.

However, it's important to note that collaboration is a complex process that requires careful consideration of the goals, strengths, and weaknesses of both companies. To be successful, the collaboration must be based on mutual benefits and a clear understanding of each company's capabilities and priorities. It's also important to note that there may be other factors that influence the feasibility of collaboration, such as competition laws, and regulatory constraints.

### **Direct competitors:**

- **Enel:** Enel is a large, state-owned energy company in Italy that provides a wide range of energy solutions, including electricity, natural gas, and renewable energy.
- **A2A:** A2A is a multi-utility company in Italy that provides energy, water, and waste management services.
- **Terna:** Terna is a leading transmission system operator in Italy that operates the country's electricity grid.

### **Indirect competitors:**

- **Other energy companies:** In addition to Enel, A2A, and Terna, several other energy companies in Italy provide similar solutions and may compete with Decentralized Energy Community (DEC) for market share.
- **Energy trading platforms:** Decentralized Energy Community (DEC) also faces competition from energy trading platforms and peer-to-peer energy trading solutions that allow individuals and businesses to trade energy directly such as FlexiDao<sup>[7]</sup>.
- **New market entrants:** Decentralized Energy Community (DEC) may also face competition from new market entrants that are developing innovative solutions in the energy sector. Such as Limejump<sup>[8]</sup>, Octopus Energy<sup>[9]</sup>, Kiwigrid<sup>[10]</sup>, Sonnen<sup>[11]</sup>, and Voltstorage<sup>[12]</sup>.

It's important to note that the energy market is constantly evolving, and new competitors may emerge over time. To stay competitive, the Decentralized Energy Community (DEC) will need to closely monitor the market and continuously innovate its offerings to meet the changing needs of its customers.

# 10. Financial Model

Revenues	2023	2024	2025
Fee Revenues	€ 812.000,00	€ 2.436.000,00	€ 4.060.000,00
Pro Package	€ 35.000,00	€ 140.000,00	€ 210.000,00
Data Package	€ 300.000,00	€ 600.000,00	€ 1.000.000,00
<b>Total Revenues</b>	<b>€ 1.147.000,00</b>	<b>€ 3.176.000,00</b>	<b>€ 5.270.000,00</b>

Expenses	2023	2024	2025
Platform maintenance	€ 600,00	€ 600,00	€ 600,00
Energy providers fee	€ 487.200,00	€ 1.461.600,00	€ 2.436.000,00
Advertising ( <i>estimated</i> )	€ 160.000,00	€ 240.000,00	€ 100.000,00
Discounts	€ 200.000,00	€ 634.375,00	€ 634.375,00
Rent	€ 6.600,00	€ 6.600,00	€ 6.600,00
Salaries and wages	€ 305.472,00	€ 404.928,00	€ 539.904,00
Microcontrollers and logistics	€ 525.000,00	€ 880.000,00	€ 920.000,00
<b>Total Expenses</b>	<b>€ 1.684.872,00</b>	<b>€ 3.628.103,00</b>	<b>€ 4.637.479,00</b>

Net Income Before Taxes: EBIT	-€ 537.872,00	-€ 452.103,00	€ 632.521,00
Income tax expenses	-	-	€ 94.878,15

<b>Net Income</b>	<b>-€ 537.872,00</b>	<b>-€ 452.103,00</b>	<b>€ 537.642,85</b>
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## Revenues

**Fee revenues** =  $(5.075\text{kWh} \cdot 0,32\text{€/kWh} \cdot 0,05 \text{ fee} \cdot 10.000 \text{ people})$  with a 200% revenue increase\* for the second year (tripling the number of people reached) and a 66% revenue increase\* for the third year.

In the above-mentioned equation, we took into account the average annual energy consumption of Italian families which is 5075 kWh<sup>[1]</sup>, a 0.32€/kWh<sup>[2]</sup> average price for the energy, our 5% fee on energy sold to people that decide to buy energy using our service. In this equation however, it is not taken into account that some of these people may buy energy on our platform for less than a year, thus we estimated that the revenue that we will be generating is the equivalent of 10.000 people\* buying energy for a whole year.

**Data Package:** It includes the microcontroller and access to our platform for energy consumers. The microcontroller will track their energy consumption and with our platform, consumers will be able to see statistics and forecasts about their energy use. This package must be bought by every energy consumer. We will sell it initially at 30€/piece.

**Pro Package:** It includes the microcontroller and access to our platform for energy producers. The microcontroller will track their energy production and with our platform, they will be able to sell their surplus at any price they wish to. Every energy producer will receive the kit for free and then we will keep their first revenue until they pay the 70€ back. We estimated that around 500 people\* should be energy producers on our platform to ensure a fair price and a fairly diversified offer.

## Expenses

**Platform maintenance:** These expenses regard the website hosting and the computing power required for our energy consumption analysis platform.

The solution that would give us the best decision-making and technical flexibility for hosting the site is a VPS that will serve as a web server where we will install the software that will provide our services to energy consumers and producers. A Virtual Private Server (**VPS**) is a form of multi-tenant cloud hosting in which virtualized server resources are made available to an end user over the internet. It provides dedicated (private) resources on a server with its operating system, allowing users to have their exclusive web hosting environment. Given the initial traffic, we estimated 50€/month to keep our platform running.

**Energy providers fee:** This is the fee we give to the actors who own the infrastructure needed to transfer the energy to the customers. We figured that since the impact of our solution will be fairly limited in the first years, a 3% fee\* should be enough to incentivize them to rent their infrastructure to our company, in this way we can easily provide every customer in every city with the energy they wish to use. However, we plan to collaborate with these actors to lower the fee in the following years.

**Advertising and partnerships:** Blockchain is new and very few people know what it is and what it can be used for. Luckily there are companies such as MasterZ which are educating people. For our solution to be used, our brand must appear solid, reliable and transparent. For the above-mentioned reasons, we should invest a large amount of money in advertising, partnerships and education to attract the equivalent of 10.000 customers\* for 1 year. In the second and third years, we plan to invest even more in advertisement and partnership to triple the number of people using our service.

**Discounts** are a useful way to attract new customers. Some of the promotions that may be offered include

- We gift the equivalent of 20€ in tokens to each friend that creates an account and buys energy for the first time.
- We gift half of the first energy purchase, with a cap to the maximum amount, to attract new customers.

**Rent:** We considered the average price for an office in Milan which is around 550€ a month<sup>[3]</sup>.

**Salaries and wages:** We need at least 4 people that work full-time to develop the token on the Polygon network. Given the latest market research, we estimated a monthly salary of 2.800€ for recently graduated students<sup>[4]</sup>. During the first three years, we are planning to hire at least 8 blockchain developers coordinated by the four co-founders that will earn a lower salary of 1.500€ (*also sharing part of the company would be a good point to decrease the cost and enhance the team's power*) to increase profitability.

**Microcontrollers:** We will build and ship microcontrollers to every customer so that they can track their energy consumption and gain access to our platform which will analyze their data and make forecasts about future energy consumption. Initially, we will sell them without making any profit to incentivize people to buy them and try our platform (we will also allow payment in installments). Thanks to our partnerships we aim to save money on logistics and by the third year we will make profits also on microcontrollers. We estimated an average price of 40€ per microcontroller and 10€/piece for its shipment.

## How do you generate returns for all the actors?

The main actors involved in our solution are:

- **Energy consumers**
- **Energy providers**
- **Energy producers**

**Energy consumers** will be able to save money by gaining access to our platform which allows them to browse and select the energy provider they prefer. However not every customer wants to spend less on energy, and some could choose to pay a bit more for “cleaner” energy.

With the term **Energy providers**, we refer to the actors that own the infrastructure needed to transfer the energy in every building. They will receive a monthly or weekly fee based on how much their infrastructure is used at any given time.

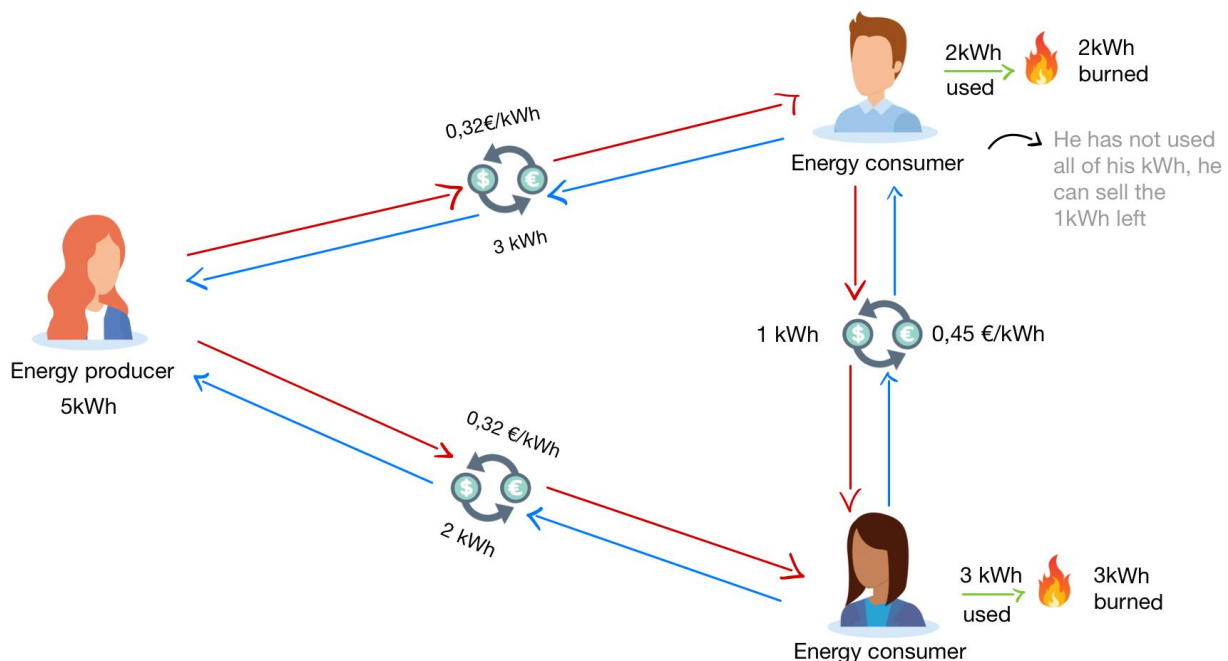
**Energy producers** can be private actors such as people with solar panels or little wind turbines as well as companies that are currently providing energy. These actors can earn money by selling their surplus to energy consumers at their preferred price. There is no guarantee whatsoever that their energy will be bought.

All the actors can pay with our token which can be exchanged for FIAT at any given time.

\* These data are based on assumptions and are not fully backed by reliable statistics, therefore they may be subject to a wider variability.

## 11. Tokenomics

We aim to raise money in FIAT through VC funds. Our token will be used to buy and sell energy on our platform. Tokens are minted by energy producers, for every kWh they decide to sell on our platform, a new token will be minted. Each token represents 1 kWh. The price of the token will track the average price of 1kWh of energy on our platform given that each energy producer can set its price. For instance, 2.537 tokens will be worth 2.537 kWh, which is about half of the average Italian per capita energy consumption. Each token will be convertible in FIAT or can be used to buy energy, so every token will be backed by the equivalent in euros used by consumers to buy energy.



Energy consumers can use our platform to buy tokens from energy producers. If consumers use all the energy they bought, then the token they have will be burned, if not they can still resell the tokens left acting as energy producers, transferring in this way the property of the kWh.

We will collect a fee every time energy consumers convert FIAT or other cryptocurrencies into our token. To avoid any fraud, money will be sent to energy producers once we check that energy is being transferred to the customers.



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## 9. Analyzing the competitive landscape

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