H_2ASPOT SOLUTIONS

H2ASPOT

GREEN HYDROGEN TO DECARBONISE INDUSTRIES

Haspot Solutions was born from the idea of making hydrogen a decarbonization solution for industries whose processes cannot stop emitting carbon dioxide. Because we believe **H**ydrogen **Has** the **Pot**ential to help these companies achieve zero net emissions

This need to cut greenhouse gas emissions can be altruistic in many parts of the world, but in Europe is driven by the **Emission Trading System** (ETS), which the European Commission has developed. Many industries are suffering high costs due to this system and **Haspot Solutions** has set as its primary goal to reduce their emissions at the same time we give carbon dioxide a second life.

Therefore, we will be able to return the competitive advantage many industries are losing in recent years, stopping them from leaving our continent on what is called the “carbon leakage”. **But how are we going to be capable of doing such a thing?**

First, we have to understand our client's needs, which are driven by reducing the cost of carbon permits at the same time we help them increase their process performance.

CLIENT PROBLEM

The segment of the market to which we are orientating our solution are companies whose competitiveness has been damaged by Emission Trading System.

The carbon permit price has risen above 80€ per tonne emitted, and this is not only a cost overrun but also disinvestment in innovation.

HASPOT SOLUTION

Our idea is to capture the carbon dioxide these companies emit and in combination with the green hydrogen, obtain synthetic natural gas.

This solution generates a circular economy plan, eliminating the distribution costs and emissions, that helps the plants to become self-sustaining.

Once we know the need, it's time to define the **technical solution**. We have developed two business models according to the client's needs, but the technical solution will follow the same scheme. The different facilities and the equipment are described as the following:

Green Hydrogen production

In order to be considered green hydrogen, renewable energy must be used to power the electrolyser. We close two PPA for a duration of 10 years each, with wind and solar farms that will supply our plants with cheap electricity.

In our business **model A** an **electrolyser of 20 MW** of power will be installed to produce the exact amount of green hydrogen that is necessary to transform all the carbon dioxide into **SNG**. Around 2.805 tonnes of hydrogen will be produced each year.

In our business **model B** an **electrolyser of 30 MW** of power will be installed to produce a surplus of green hydrogen that will give the project another income source. Around 4.208 tonnes of hydrogen will be produced each year in this case.

Carbon Dioxide capture

The **CCUS facility** (Carbon Capture Use & Storage) has been designed with the possibility of capturing all the emissions in a near future but for the moment, we will capture the amount we can transform to SNG with the help of green hydrogen.

Therefore, a total amount of **15.554 tonnes of carbon dioxide** are captured and transformed saving our clients more than **one million euros** each year. But we can even exit them from the system generating bigger savings yet.

Synthetic Natural Gas

Combining the two inputs and electricity, synthetic natural gas can be produced with the same quality as the one our clients consume. In both business models, an SNG facility of **10 MW** of power will be installed producing around **79.200 MWh per year**.

MODEL A

Where the **exact amount of hydrogen** that's **needed to transform all the** carbon dioxide into SNG will be produced:

TECNHICAL ESPECIFICATIONS "A"

- **Electrolyser**: 20 MW
- **Hydrogen production**: 2.805 tons per year
- **SNG facilities**: 10 MW
- **SNG production**: 79.200 MWh/year
- **CCUS facilities**: capture the carbon dioxide transforming 15.554 of tons per year into SNG.
- **Oxygen facilities**: 22.440 tons per year

MODEL B

We will produce more hydrogen in order to fulfill the exponential client demand, creating a new source of income:

TECNHICAL ESPECIFICATIONS "B"

- **Electrolyser**: 30 MW
- **Hydrogen production**: 4.208 tons per year
- **SNG facilities**: 10 MW
- **SNG production**: 79.200 MWh/year
- **CCUS facilities**: capture the carbon dioxide transforming 15.554 of tons per year into SNG.
- **Oxygen facilities**: 33.660 tons per year

MARKETING PLAN

Haspot Solutions was built around the idea of giving our clients **flexibility** and control over their production process, but also giving our stakeholders the capacity of generating profit reducing the risk and uncertainties to the minimum.

We will give our clients the possibility to establish a **Joint Venture (JV)** between both sides. This will have several outcomes, we will become partners so they will benefit from the expected profits making more attractive our solution for them. But we will also minimize the technical risks and we will reduce the amount of money we must invest.

We will offer them a **buy option** at a certain moment of the life duration of the project, leaving them in a preferred position in case the facility is sold, which will give them a feeling of control that will add value to our offer. These are the reasons why we think the next company structures will be the best.

A **parent company** named **Haspot Solutions** will be founded and inside of it several **SPVs** (Special Purpose Vehicles) will own every project and its facilities (this kind of vehicle will be set for the joint ventures). This will give us the chance to sell one plant separately and fast, to the client if he wants to (buy option mentioned) or to another investor.

With this scheme, we can **grow in the first years by making good partnerships** that will allow start earning money and generating profits, and after that, we will develop new projects knowing that we can approach our new clients with the expertise and financial power we did not have at the beginning.

ROADMAP

H2ASPOT

2022-2027 | **2027-2037** | **2037-2057**

SHORT-TERM STRATEGY

Our idea is to find **one or two clients**, develop at least one project and once we have proven its efficiency, start gaining new clients by the same structure (JV if possible and small plants).

MID-TERM STRATEGY

Considering bigger plants with bigger emissions that will allow us to produce more SNG and hydrogen. This expansion financial rounds can be helped by the selling of some initial projects (SPV & JV).

During 10 years we will be growing in the distribution channels and capturing new clients, also studing the distribution options in this stage, avoiding plants wrong placed.

LONG-TERM STRATEGY

iF the mid-term strategy is well developed, we will have bigger projects and well located. We will be producing and distributing huge amounts of synthetic natural gas and green hydrogen.

But even so, competing with the main firms during that period can be complicated, in that case, selling the parent company to one of them will be considered.

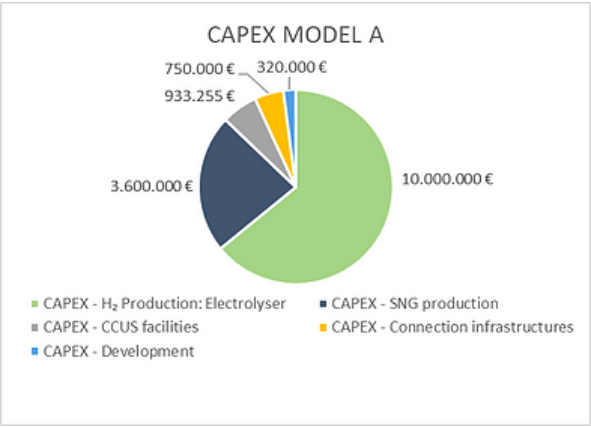
PROJECT DEVELOPMENT

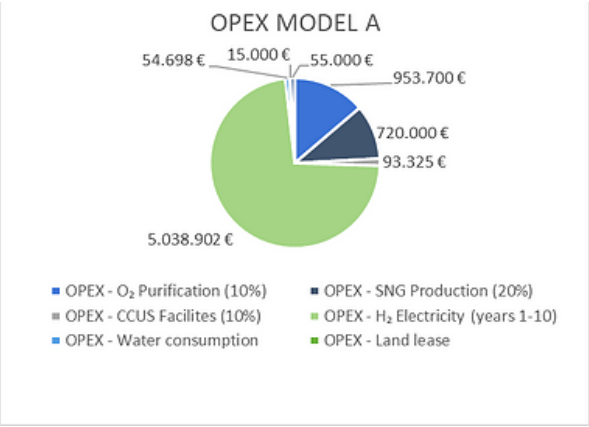
Regarding the project development, the same schedule is followed for both models. There is no official deadline right now, but we would like to be operating by 2025, which means having a COD (Commercial Operation Date) around Q4 OF 2024.

	2022		2023				2024			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Consortium agreement (JV)										
Feasibility Study										
Engineering										
Land lease and government permits										
Project finance										
Procurement process										
Construction										
Commissioning										

MODEL A: STEEL COMPANY MEGASA SIDERURGY S.L.

We are going to show the result for the model A, which we consider its going to be our first step. Shown in the following graphics we have the CAPEX and the OPEX that we have explained in the project:





The several fiscal and financial assumptions (65% leverage rate and 5% interest rate) that we have taken into consideration for the analysis are explained in the main project. But to give an idea of the earnings this project will generate from the two outputs we attached the first year's income:

Actual years	2025	2026	2027
Project years	1	2	3
O2 price (€/MWh)	0,20 €	0,21 €	0,21 €
O2 income	3.814.800,00 €	3.929.244,00 €	4.047.121,32 €
SNG price (€/MWh)	52,00 €	52,00 €	52,00 €
SNG income	4.118.400,00 €	4.118.400,00 €	4.118.400,00 €
Total income	7.933.200,00 €	8.047.644,00 €	8.165.521,32 €

Therefore, the IRR obtained for the equity and the project, as well as the simple repay in years, are shown down below:

PROJECT RESULTS	
Equity IRR	9,31%
Simple repay (years)	14,33
Project IRR	7,35%

In what we consider to be the first stage of **Haspot Solutions**, we will only develop model A, and for that, we will need 6 million €, but considering we will come to an agreement with the client signing a JV:

	Construction Budget	Margin 2,00%	JV	Legal Expenses	Total
Stage I	5.461.139,17 €	5.570.361,96 €	2.785.180,98 €	50.000,00 €	2.835.180,98 €

In our first approach to early investors, we have closed an initial agreement with a family office from Aragon named **Serrablo Sicav**, with an equity capital of around 12 million € they have asked for at least a 30% share with a 900.000 € valuation. The **founder team** wants to maintain control of the parent company with at least **51%**, providing nearly 300.000 € each one. As a result of this, we need to close another funding round for the **450.000 € remaining** for a **15% stake** in the company.

Shareholders	Share	Investment	Return year 20
Miguel Alonso	10,48%	297.036,20 €	1.788.793,61 €
Eduardo González	10,48%	297.036,20 €	1.788.793,61 €
Manuel Queiro	10,48%	297.036,20 €	1.788.793,61 €
Juan Ign. Geisser	10,48%	297.036,20 €	1.788.793,61 €
Jorge Bayona	10,48%	297.036,20 €	1.788.793,61 €
Total founders	52,38%	1.485.180,98 €	8.943.968,03 €
Serrablo Sicav	31,74%	900.000,00 €	5.419.926,15 €
New investor	15,87%	450.000,00 €	2.709.963,07 €
Total	100,00%	2.835.180,98 €	17.073.857,25 €

With **Haspot Solutions,** we offer our investors the opportunity to enter the green hydrogen industry adding more value to the product due to its application. Reducing carbon dioxide emissions for these industries is a legal and financial obligation, and this **need is yet to be covered** by solutions like the one we are presenting. We believe that both business models are just the first step in a long journey to achieve zero net emissions for our clients.