



# PONICS TECHNOLOGIES

Industrial-grade Aeroponic equipment for greenhouses,  
HoReCa and individual growers

ICO WhiteBook



# STEP-BY-STEP INTRODUCTION

The purpose of this White Book is to present **Ponics Technologies** (hereinafter **Ponics Tech**) to potential participants due to the forthcoming ICO Crowdfunding process and to offer the **POT Token** (ETH based, ERC223 type token)

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## Foundation of Ponics Technologies

The work on the project has started in early 2014 as a hobby of Michael Kiselov. The main goal was to develop a convenient and mobile aeroponic unit for cultivation of determinant plants, such as tomatoes.

Thanks to the profound knowledge of chemistry and the experience of engineering development, obtained at the Kiev Polytechnic Institute (KPI) and the National Academy of Sciences of Ukraine, it has been possible to develop an innovative unit, that allows plants to grow aeroponically on an industrial scale. This allowed to grow a huge number of plants on a small area (70000 plants on 500 square meters), to reduce the cultivation cycle (for basil to 28 days from seed to harvest) and to reduce the cost of maintenance and heating.

In 2015, a pilot investment project has been implemented in the Moscow region named GoodFarm. This proved the robustness of the technology and the business model in general.

Subsequently, a considerable amount of attention and time has been devoted to improving technology, treating «childhood» diseases and preparing the project for ICO.

## Social Importance

Thanks to modern technologies and our developments, we can offer units for growing plants in any climatic conditions, while ensuring unprecedentedly low consumption of pure water, fertilizers and electrical power.

In fact, in the arid deserts of Qatar and in Africa, where there is a crisis of clean water, or densely populated metropolitan areas of the Western world or Asia, you can grow affordable and high-quality plants at relatively low costs.

## Market overview

The market of agronomic equipment all over the world is occupied by manufacturers of floodwater hydroponic tables, which makes it possible to grow an extremely small number of plants per square meter with a huge expenditures on water and fertilizers. Subsequently, the spent solutions with a high content of mineral substances are discharged into the environment and have a very negative impact on environmental indicators.

Thus, our technology has no competition in existing markets and offers incredible prospects for both farmers and consumers. It does not pollute the environment, but allows to increase yield per area and to produce the most pure product.



# Technology Overview

Our technology is based around the following number of criteria: sustainability, environmental friendliness, productivity, quality and economy

At the moment, we are ready to offer to our customers 2 different types of equipment: **H-Type systems** are designed for the cultivation of determinant plants such as lettuce, basil, arugula, spicy and aromatic herbs (such equipment has already been successfully implemented in the framework of the GoodFarm project) and the **L-Type systems** for the cultivation of indeterminant plants (such as cucumber, tomato, pepper), strawberries and melons.

[You can see our products, their photos and specs on the official web-site of Ponics Technology \(products section\)](#)

In the future, on the basis of these systems, separate equipment will be developed for use in large greenhouse farms, for cityfarming, in the HoReCa sector, and the regular household.

## Sustainability

We are using materials and mechanisms that have practically unlimited lifespan or can be easily processed and re-used. So, most of our installations are made of stainless steel or food grade plastics with a high degree of polymerization.

Pumping equipment can be uninterrupted operated for up to 5 years and after the end of this period, it will most likely require only minor repair of bearings and seals.

Automation is maximally protected against any influence from outside. The equipment has several provisions for performing this function in order to secure proper functioning in case of a malfunction of the main one, that significantly extends its service life. But even in case of a breakdown, the automation can be easily repaired and put into operation again.

## Environmental friendliness

Thanks to the automation integrated into the nutrient preparation units, water after

use is never discharged into the environment and is re-enriched with nutrients and minerals.

The consumption of electric power by the units is extremely low due to the use of modern light sources, that can be obtained from renewable sources such as sun, wind and geothermal energy.

## Productivity

The question of productivity is extremely versatile, starting from the efficiency of one unit up to the vertical and horizontal scaling.

Thanks to the aeroponic method of cultivation, plant roots get unlimited access to air oxygen and the right volume of fertilizers. This greatly increases the rate of growth of green mass of plants and yield.

The below shows a comparison of aeroponics and hydroponics in matters of the rate of plant growth and the possibilities of cultivation.

Item	Ponics Tech Aeroponics	Hydroponics
<b>Cultivating culture</b>		
Lettuce	+	+
Basil	+	+
Arugula	+	-
Species	+	-
Mint and lemon balm	+	-
Exclusive hybrids	+	-
<b>Possibility of local light culture</b>	+	-
<b>Planting density</b>	<b>5X or more</b>	<b>1X</b>
<b>Number of staff</b>	<b>0.25X</b>	<b>1X</b>
<b>Fast scaling possibilities</b>	+	-
<b>Complete stop for maintenance</b>	-*	+
<b>Operational adjustment of technological indicators</b>	+	-
<b>Automation of technological processes</b>	+	+-
<b>Technological "hardness"</b>	-	+
<b>High production culture</b>	=	=

\* Design of our products is based on the modular concept which makes it possible to clean and maintain equipment without complete shutdown of production facilities. This significantly increases the technological flexibility of production and positively affects the economic performance.

Cultivating culture		Cultivation cycle time		Advantage of aeroponics
		Aeroponics	Hydroponics	
Lettuce	Leafy	38	45	7
	Iceberg lettuce	64	80	16
	Roman	55	75	20
	Cress salad	40	60	20
	Seedbed Office	-5 - 7 days		
Spicy and aromatic herbs	Basil (full plant)	42	75	33
	Cutted Basil	36	69	33
	Fennel	42	64	22
	Parsley	50	65	15
	Green onions	18	-	
	Mint	45	75	30
	Thyme	75	100	25+
	Savory	75	100	25+
	Salvia	95	120+	25+
Gustatory herbs	Arugula Poker	45	75	30
	Arugula Solitaire	50	80	30
	Spinach	60	70+	10+
	Mustard (leafy)	50	72	22

The vertical scaling is limited solely by the size of the room in which the settings are located. The initial height of the H-Type unit is 2 meters and it accommodates 5 tiers of 84 plants each (420 plants in one unit), while the height can be increased up to 6 m (1260 plants in one unit). The L-Type installation is not limited in height and can be extended virtually indefinitely.

## Quality

Products grown with the use of the Ponics Tech equipment are of unsurpassed quality. Optimum rated feeding, fertilization and lighting makes it possible to produce organic pure food containing the maximum amount of vitamins and nutrients.

Such foods have an extended shelf life (up to 14 days for basil and up to 25 days for onions) and retain their usefulness for as long as possible.

## Economy

The Ponics Tech units in comparison to the classic hydroponic technologies have an equal price in terms of square meter of occupied space, but at the same time they allow to multiply the number of plants grown per square meter, reduce the growing cycle and improve the quality of the output product.

The repeated use of a nutrient solution with its composition adjustment significantly reduces the need for clean water, and hence the cost of water treatment and fertilizers.



# Initial Coin Offering

## Business Model

The business model of Ponics Tech includes 3 components: equipment sales, service and agro-technological support.

Sales of equipment are planned to be carried out with allowances not more than 15% of the cost, which primarily depends on the amount of funds collected within ICO and the company's ability to purchase production equipment. So with full funding we are able to produce an H-type unit with a price not more than \$ 1000 for the cultivation of 480 plants.

Service support is presented in a limited format. Due to the initial margin of strength and corrosion resistance of equipment, its service life is extremely long. Maintenance will be subject to pumping stations (bearings and gaskets), as well as lighting equipment. The major amount of parts will be manufactured independently by Ponics Tech, or in some cases - supplied by partners (lighting equipment by Osram and Philips).

Within the framework of agro-technological support, Ponics Tech is developing a comprehensive training program. In particular, we envisage the possibility of training the personnel of the customer to work with equipment, remote support by our specialists and visiting services of agronomists and technicians.

The Ponics Tech Automation technologies will have a completely independent interface with on-line management, which will allow the farm monitoring from anywhere in the world. The uninterrupted operation of such automation is guaranteed due to duplication of methods of communication with central servers and the use of cloud platforms (in the future, probably, blockchain-based)

## Project Management and responsibility

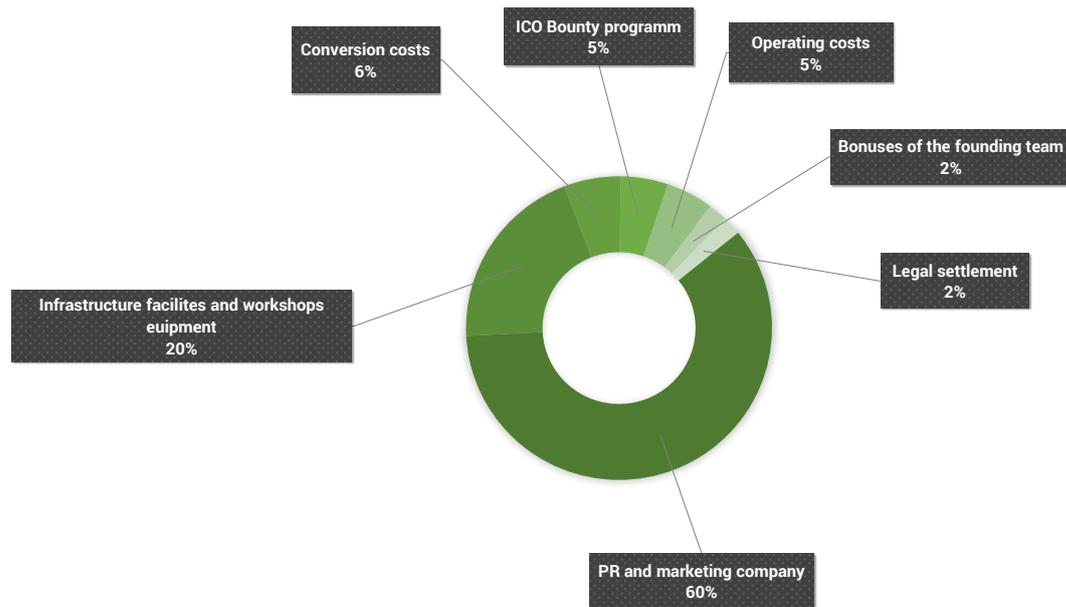
The Ponics Tech is a Autonomous Organization, and it's owners are holders of POT token. The structure of Ponics Tech consists of different organizations that carry out the tasks of organization of investments, development and production of equipment, marketing and monetization, legal support. The executive body is

the administrations headed by the CEO, which manages the Ponics Tech on behalf of the holders of the tokens. Decisions on important strategic issues are made by voting among the holders of the tokens based on shares.

## Roadmap



## Distribution of tokens



## Terms of participation

Sales of POT tokens occur by crediting payment to the Smart-Contract purse, in return, tokens are sent to sender's account. Income belonging to holders is distributed in equal shares and paid according to the actual number of tokens issues by tranders to purses of their holders.

US citizens and residents are not allowed to contribute. We also rely on the responsibility of investors and compliance with their local legislations.



# Token offer info

**POT**

Short name of token

**21.05.2018-27.05.2018**

Closed sale

**200 000 000 POT**

Total amount of tokens for sale

**05.06.2018-20.07.2018**

ICO

**40 000 ETH**

Planned involvement

Tokens will be delivered automatically in case of payment to smart-contract, or will be send manually within 14 days in case of using other payment methods

**1ETH = 5000POT**

Token price

**All unsold tokens will be burned**

## Special info

5% - ICO Bounty Programm

5% - Referral System

## Tokens bonus

20% bonus for the first 20 000 000 POT

15% bonus for the next 50 000 000 POT

10% bonus for the next 80 000 000 POT



# Legal Aspects

Operational activities on the territory of the Russian Federation, due to the complexity of using of the crypto currencies, will be carried out on behalf of OOO SoyuzPro, which exists on the market for over a year. Company requisites and registration certificate are shown on the right. Also it's possible to check all information on the official website of Federal Tax Service of the Russian Federation at <https://egrul.nalog.ru/>

ОГРН 1177746494133

ИНН 9729084365

ЕДИНЫЙ ГОСУДАРСТВЕННЫЙ РЕЕСТР ЮРИДИЧЕСКИХ ЛИЦ  
Сведения о юридическом лице  
ОБЩЕСТВО С ОГРАНИЧЕННОЙ ОТВЕТСТВЕННОСТЬЮ "СОЮЗПРО"

ОГРН 1177746494133  
ИНН/КПП 9729084365/772901001  
по состоянию на 20.07.2017

№ п/п	Наименование показателя	Значение показателя
1	2	3
<b>Наименование</b>		
1	Полное наименование	ОБЩЕСТВО С ОГРАНИЧЕННОЙ ОТВЕТСТВЕННОСТЬЮ "СОЮЗПРО"
2	Сокращенное наименование	ООО "СОЮЗПРО"
3	ГРН и дата внесения в ЕГРЮЛ записи, содержащей указанные сведения	1177746494133 19.05.2017
<b>Адрес (место нахождения)</b>		
4	Почтовый индекс	119501
5	Субъект Российской Федерации	ГОРОД МОСКВА
6	Улица (проспект, переулок и т.д.)	УЛИЦА ВЕРНАЯ
7	Дом (здание и т.д.)	ДОМ 1
8	Корпус (строение и т.д.)	КОРПУС 2
9	Офис (квартира и т.д.)	ПОМЕЩЕНИЕ 1-4
10	ГРН и дата внесения в ЕГРЮЛ записи, содержащей указанные сведения	1177746494133 19.05.2017
<b>Сведения о регистрации</b>		
11	Способ образования	Создание юридического лица
12	ОГРН	1177746494133
13	Дата регистрации	19.05.2017
14	ГРН и дата внесения в ЕГРЮЛ записи, содержащей указанные сведения	1177746494133 19.05.2017
<b>Сведения о регистрирующем органе по месту нахождения юридического лица</b>		
15	Наименование регистрирующего органа	Многофункциональное учреждение Федеральной налоговой службы № 46 по г. Москве
16	Адрес регистрирующего органа	125373, г. Москва, Печодный проезд, дом/здание 3, стр.2
17	ГРН и дата внесения в ЕГРЮЛ записи, содержащей указанные сведения	1177746494133 19.05.2017
<b>Сведения об учете в налоговом органе</b>		
18	ИНН	9729084365
19	КПП	772901001
20	Дата постановки на учет	19.05.2017
21	Наименование налогового органа	Инспекция Федеральной налоговой службы № 29 по г. Москве
22	ГРН и дата внесения в ЕГРЮЛ записи, содержащей указанные сведения	21774727025 19.05.2017

With the purpose of the investments «input», the company «Ponics Technologies» will be registered in one of the countries that are loyal to the turnover of cryptocurrency funds. «Ponics Technologies» is the the root company and will be established as the founder in OOO SoyuzPro on 100%.

Also in the property of Ponics Technologies a corresponding trade mark will be registered.

When entering the international market, the legal department of Ponics Technologies will develop separate strategies for each individual country, including the establishment of subsidiaries, separate autonomies and registration of related trademarks and signs.

All developments in the field of agronomy and agrotechnology, implemented within the framework of the Ponics Technologies project will be patented. The patent holder is the root «Ponics Technologies» company.



# Investor's Benefits

What does the POT Token holder get?

- Share in the multimillion-dollar high-tech business of the profitable industry.
- The share of the profit of all projects and developments of Ponics Technologies
- The right to manage business through general voting on strategic issues.
- The ability to offer own ideas on development and manufacture of the modern agronomic equipment and take part in the complete process of research and development.
- The ability to purchase equipment at cost price and to get a free support to start your own agronomic business.
- Guarantee of protection of property rights on the basis of their mass publication in the system of Ethereum blockchain.
- Ability to manage the property right to transfer tokens to other users.
- Employment opportunities.
- Participation in corporate events.