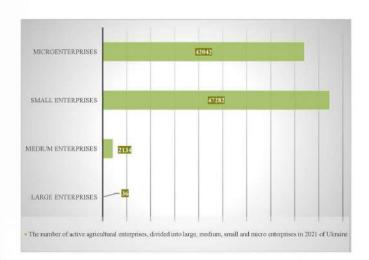
# PROBLEMS SOLVED BY BIODIESEL

economic	a reduction in the cost of agricultural products by 15-17% thanks to the use of biodiesel energy - obtaining high-calorie fuel, ensuring the energy independence of the country	
energy		
ecological	ecological - the use of ecologically clean fuel, which will reduce CO <sub>2</sub> emissions into the environment	
financial	financial - reduction of fuel purchase costs	
social	social - creation of new jobs	

## **MARKET**

The potential market is represented by 2,134 medium-sized agricultural enterprises and more than 89,000 small and micro enterprises in the agricultural sector of Ukraine.



## **OUR TEAM**



Yaroslav GONTARUK PhD of Economics, Founder



Inna HONCHARUK Doctor of Economics, Professor Project manager



Olha ALIEKSIEIEVA PhD in Entrepreneurship, Promoter



# **GreenDiesel**

Our mission: Clean environment. Our goals: Energy independence



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#### RELEVANCE

Prices of fuel and lubricants are rising in the world.

Because of the use of petroleum products,  $CO_2$  emissions increase annually. This negatively affects the achievement of eco-goals to reach the climate neutrality.

In connection with military actions in Ukraine, farmers face a shortage of petroleum products during the period of basic agrotechnical operations.

Selling prices of oil crops for small and medium-sized agricultural enterprises are low. This leads to a decrease in the level of profitability of farm enterprises and to their energy dependence on imported oil products.



#### STARTUP IDEA

Development of business plans for small and medium-sized agricultural enterprises which process oil crops into biodiesel for ensuring their own fuel needs and reducing the cost of final products.

## **ADVANTAGES**

- 1. Ensuring energy autonomy of small and medium-sized agricultural enterprises.
- 2. Increasing the competitiveness and profitability of the enterprise.
- 3. Reduction of greenhouse gas emissions and decrease of environmental pollution.
- 4. The use of by-products of the processing of oil crops (meal) as highly concentrated fodder in animal husbandry.

# Comparative economic efficiency of rapeseed selling and producing biodiesel from it in Ukraine, 2023

Traffice	Sale of 1 ton of rapeseed	
Indicators	domestic market	export
Full cost, UAH	6181,8	6181,8
Sale price, UAH	11684,4	10449
Profit, UAH	4968,2	5818,2
Rate of return, %	80,4	94,1
Production of biodiese	I from 1 ton of rapeseed	
Costs for seed processing, UAH	1090,9	
Total costs, UAH	7272,7	
Output of biodiesel, 1	400,0	
The price of 1 liter of biodiesel, UAH	23,0	
Total cost of biodiesel, UAH	9200,0	
Price of cake, UAH	3025,0	
Price of glycerin, UAH	2608,2	
Cost of manufactured products, UAH	14833,2	
Cost of 1 liter of biodiesel, UAH	18,18	
Profit, UAH	7560,5	
Rate of return %	104.0	

# **READINESS LEVEL**

Today, on the basis of the Scientific and Research Laboratory of Bioenergy of the Educational and Scientific Center of VNAU, the research and practical implementation of the advanced Ukrainian and international experience in the production of biodiesel has been conducted, as well as consultations on the production and use of biofuel have been provided to educational and research institutions of the region.

Our equipment is able to process 200 liters of oils to produce 200 liters of biodiesel in 1 hour.



