

Sustainable soya supply from Ukraine

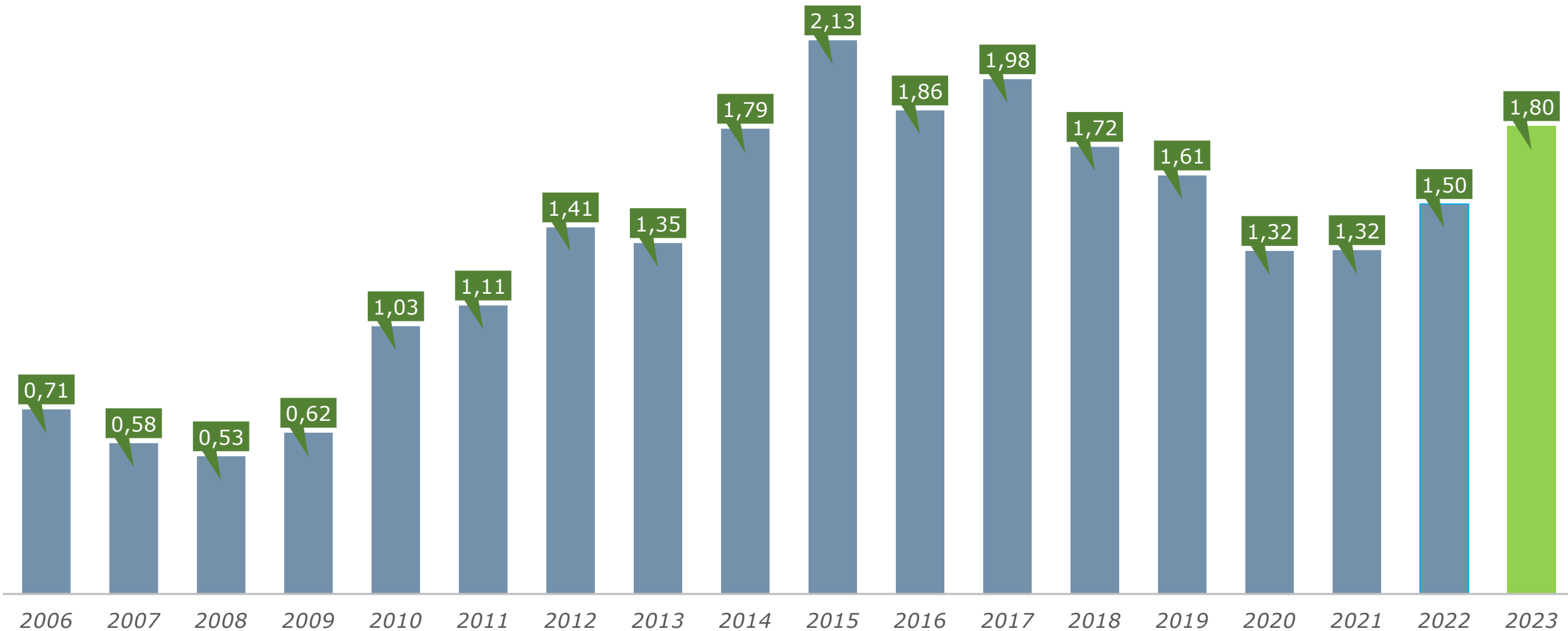
Volodymyr Pugachov, Donau Soja

18 March 2024

Soya area in Ukraine

(data by State Statistical Service and Ministry of Agriculture)

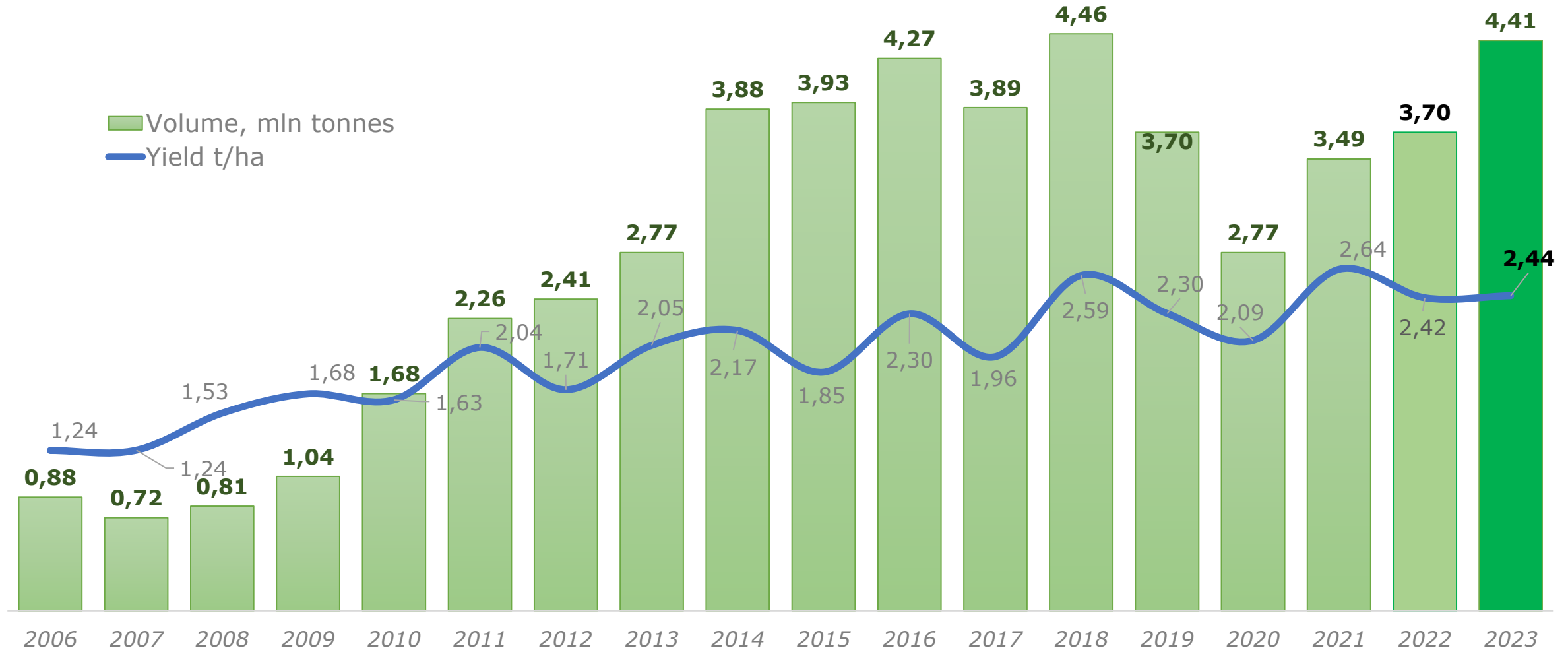
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Soya yields and harvest

(data by State Statistical Service and Ministry of Agriculture)

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Ukraine is self-sufficient with crops inc. soybeans

- **Ukraine is self-sufficient** with agricultural products including soybeans. Ukrainian agricultural industry is export oriented.
- Under normal circumstances, **75%** of Ukraine's grain production was exported.
- Self-sufficiency ratio **4 times exceeds** the internal consumption.
- Large part of domestically processed soya is **exported as soya meal**.
- Exporting is the matter of normal functioning of the agriculture industry of Ukraine.

Soya Yield Gap in Ukraine



Concept is based on definition and measurement of yield potential.

Soya a yield gap in Ukraine is nearly **0.9 t/ha**, representing about 27% of the soybean **yield potential** (rainfed).

This means that on the country level, **additional 1.3 mln tonnes** of soya could be harvested, if best farming practises are applied.

In other words: 10% of European production might be additionally produced only in Ukraine as the conciseness of best farming practices application.

*Yield gap is applicable
to all field crops*

Sources:

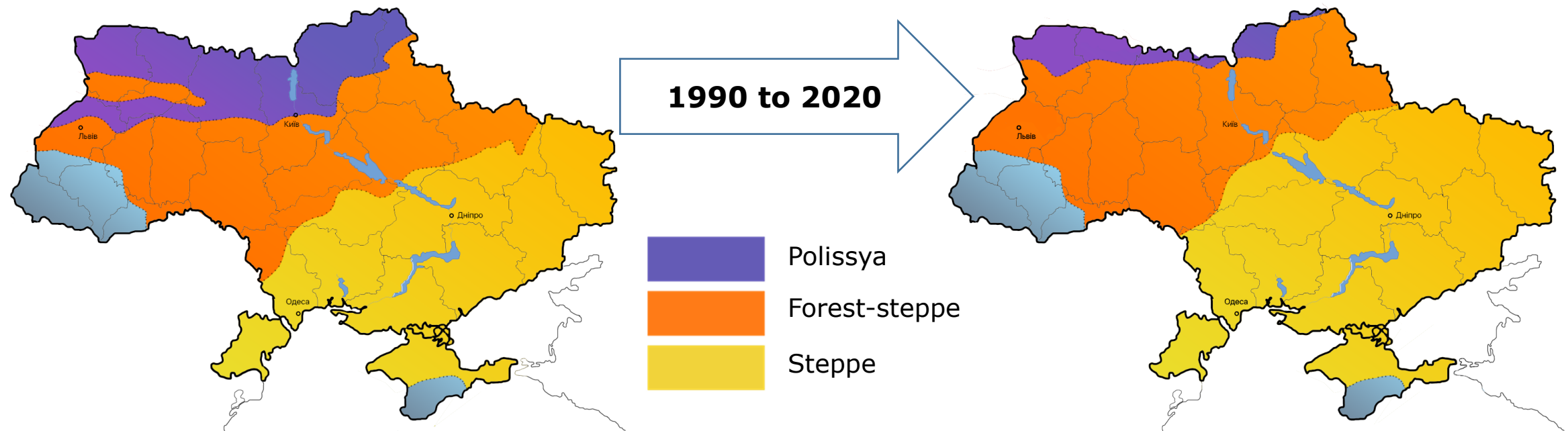
Global Yield Gap Analysis (by Wageningen University)
State Statistical Service of Ukraine

Climate change in Ukraine

data source: Hydrometeorological center Ukraine

The climate conditions in Ukraine changed significantly for the last 30 years. For e.g. seasons 2020 and 2021 were especially untypical:

- dry season 2020 with scarcity of rain resulted in the **harvest loss of around 14%**;
- extra-rainy season 2021 was better for average soya yield in Ukraine, but **lead to partly losses** by certain farmers;
- untypical weather conditions during harvesting 2022 – near a month of **consequent heavy rains**.



Agri-climatic Atlas for soya growing in Ukraine

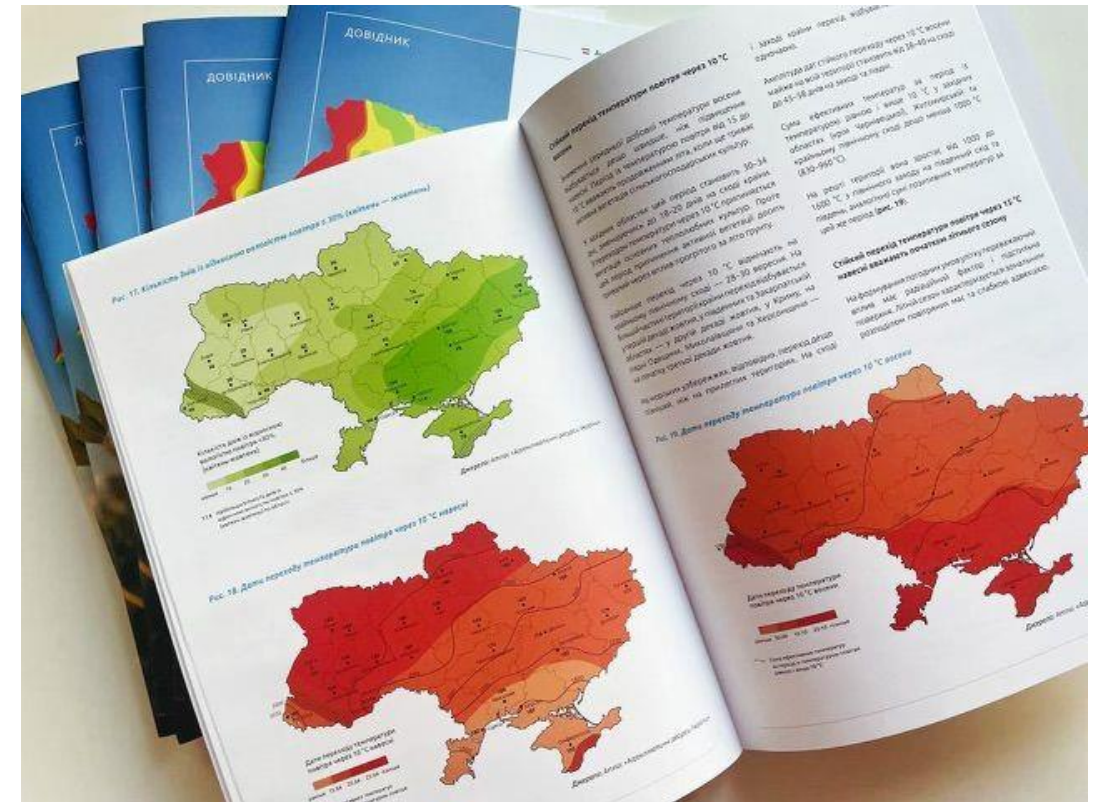
Agri Climate Atlas provides comprehensive information on climate change, its impacts, and potential adaptation measures in the soya production in Ukraine.

The Atlas includes data and information on:

- climate projections;
- soya suitability and soil characteristics;
- water resources.

This is helpful for soya farmers to make informed decisions about variety selection, irrigation, and pest management, among others.

We're excited about the potential of Atlas to help Ukraine's soya farmers and policymakers to adapt to the issues of climate change.








Soya Discussion Club

Special form of knowledge transfer:

an online workshops for experts, scientists and agricultural influencers in Ukraine.

Experts were focusing on the following topics :



-  limited resources on-farm (seeds, fertilizers, fuel etc.).
-  proper non-GM seeds selection depending on the climatic region was covered
-  benefits of using microbiological preparations as a solution to decrease fertilizer use
-  importance and practical examples of the implementation of the integrated pest management (IPM) on the farm
-  adaptation of soya production technology to climate change



Practical on-field studies with agricultural Universities

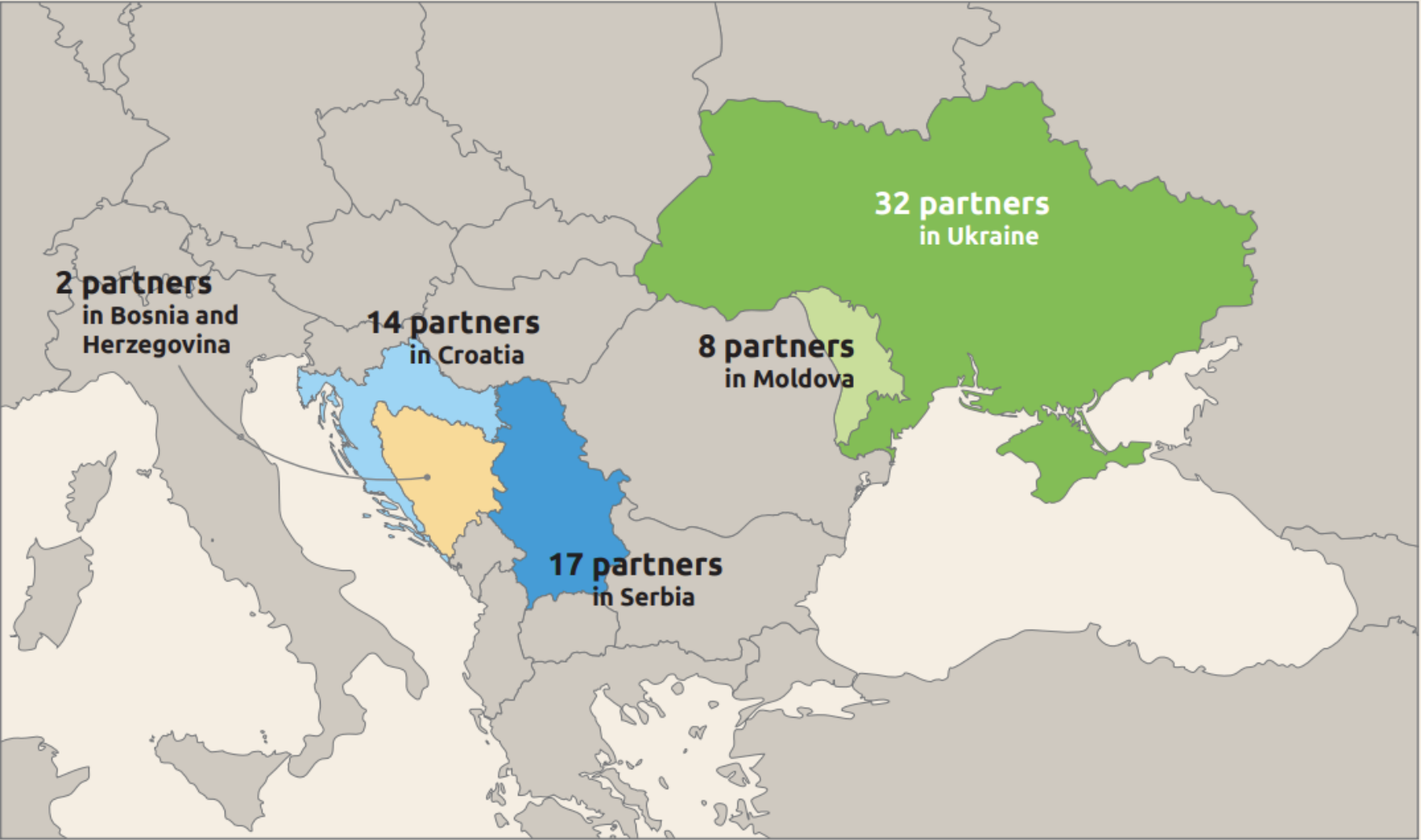
Donau Soja established specific trials to demonstrate the importance of proper selection of non-GM seeds, sowing density and soya cultivation technology depending on the climate zone. Trial soya plots were established on the premises of two scientific institutions – SNAU (Sumy region), BTsNAU (Kyiv region). The Donau Soja Team supported the technical organisation and coordinated the establishments of the trials

DS wrote special knowledge exchange materials with a focus on the following topics:

-  proper selection of non-GM seeds and cultivation technology to support switch from GM to non-GM technology;
-  steps to on-farm adaptation of technology to EU practices, in particular elimination of hazardous pesticides use.



Protein Partnership Programme



The timeline of the Programme development

2019/2020

2021

The Programme has started in **Serbia** and **Croatia**

Ukrainian partners have joined the Programme

2022

2023

New partners from **Moldova, Bosnia and Herzegovina** have joined the Programme

Continuation of partnership projects in all **5 countries**

Implementation of Protein Partnership programme

Donau Soja Organisation:



Conducts training for agricultural producers and farmers on sustainable agricultural production approaches and techniques.



Covers Donau Soja / Europe Soya certification costs (scope: farmer + collector), including laboratory GM and pesticides analyses.

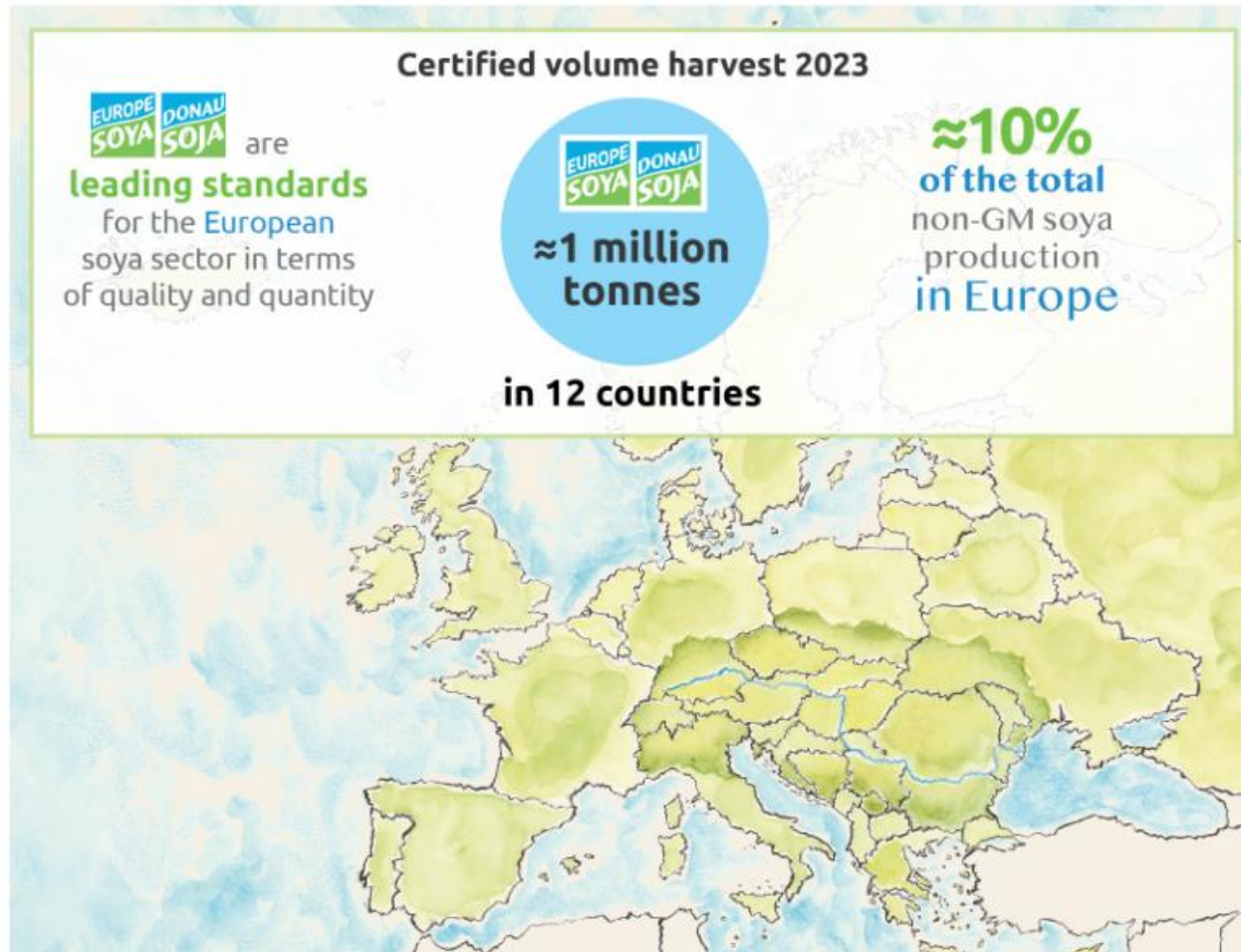


Positioning the brand of Protein Partnership partners – as producers of «climate friendly soya» in Europe.



1 mln tonnes of soybeans are DS certified in Ukraine 2022-2023

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10% of European non-GM production is under Donau Soja / Europe Soya certification



1 million tonnes of certified ES / DS soybeans from 12 countries after harvest 2023



Over **200** collectors in the system



Over **950** certified partners



14 crushers with Donau Soja/Europe Soya/Non-GM Danube Region Standard certification + **31** smaller soya processors



Over **9,000** soybean producers in our system

CO₂ FOOTPRINT / SOYABEANS / SOYAMEAL

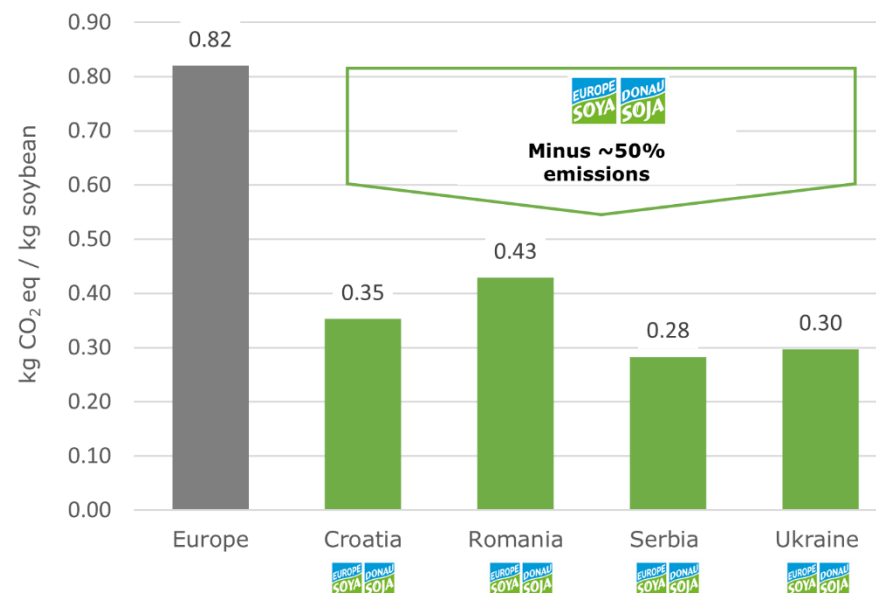
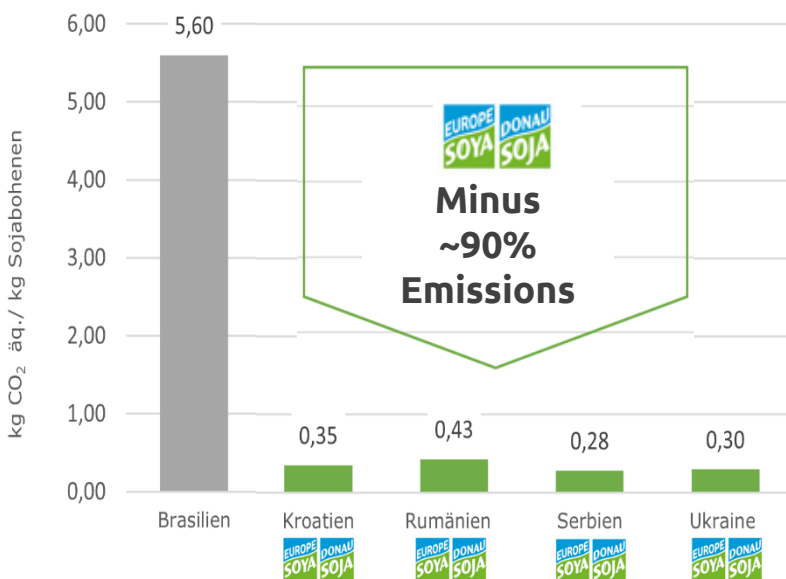
data source: Blonk Consultants 2022, Agri Footprint 5.0

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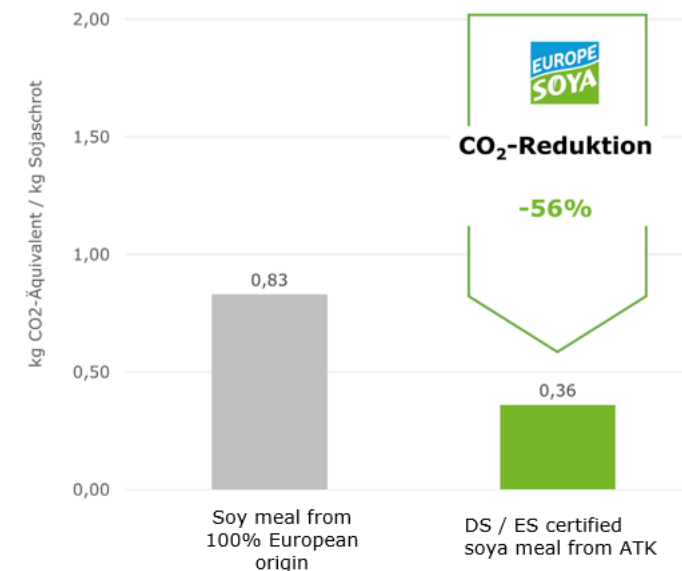


CO₂-Footprint per kg Soya beans

Carbon footprint per kg soybeans



CO₂-Footprint per kg Soya meal



- DS/ES CO₂ data available as „branded datasets“ in recognised databases
- In SBTi FLAG format



Thank you for your attention!

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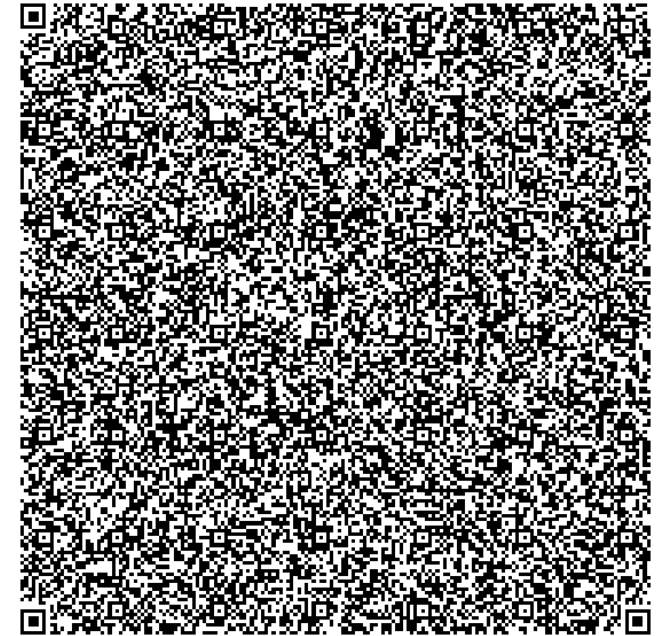


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Business and Climate Change: Towards
Net Zero, Cambridge Institute for
Sustainability Leadership (CISL)



Sustainability: Strategies and
Opportunities for industry, Massachusetts
Institute of Technology (MIT)