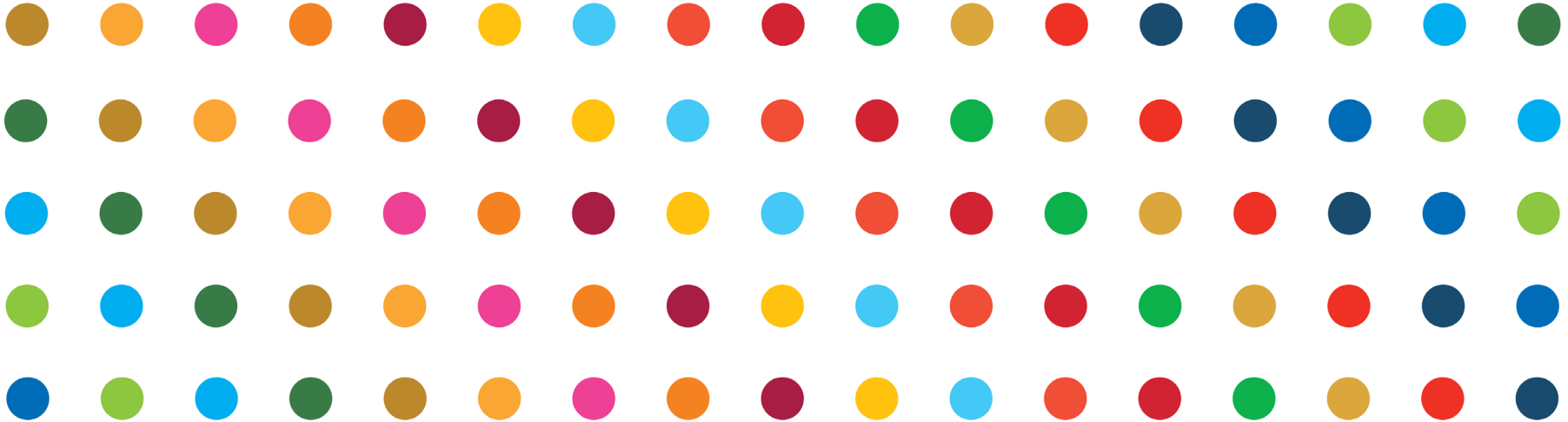
The FAO-UNECE-UNEP SDG Fund Renewable Energy Ukraine Project

+ A Vision for a Renewable Energy Future in the Agri-Food Sector of Ukraine

UNITED NATIONS
UKRAINE

Food and Agriculture Organization of the United Nations



OUR PROJECT: JOINT SDG FUND

WHO?

FAO, UNEP, UNECE conducted a comprehensive analysis addressing a request from the **Ministry of Agrarian Policy and Food (MAPF)** in 2022 to investigate the bioenergy potential of Ukraine

WHAT?

The global energy crisis exacerbated by the war Ukraine demands decisive action; Ukraine's untapped potential could resolve many energy issues without affecting food production

HOW?

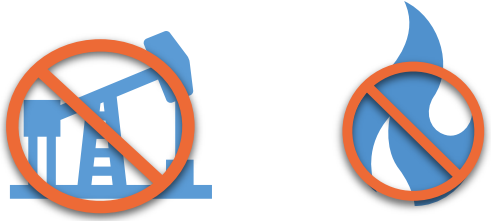
Assessment of biofuel potential w/o compromising food or environment
Development of scenarios
Recommendations for Ministries/stakeholders

UNITED NATIONS
ECONOMIC COMMISSION
FOR EUROPE

UNEP

Components Assessed:

End Goals Assessed For:

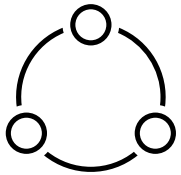


Eliminate imported fuels and gas

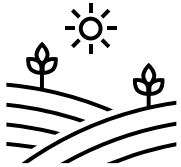
Food continuity

biogas for export

Methodology and Results

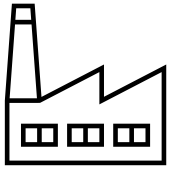


assessment of the untapped potential of biomass and agricultural waste



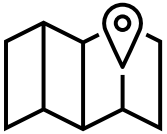
Final report on websites of FAO, UNEP, UNECE and UABIO

s study of production potential and feedstock for **biomethane, biodiesel and bioethanol**



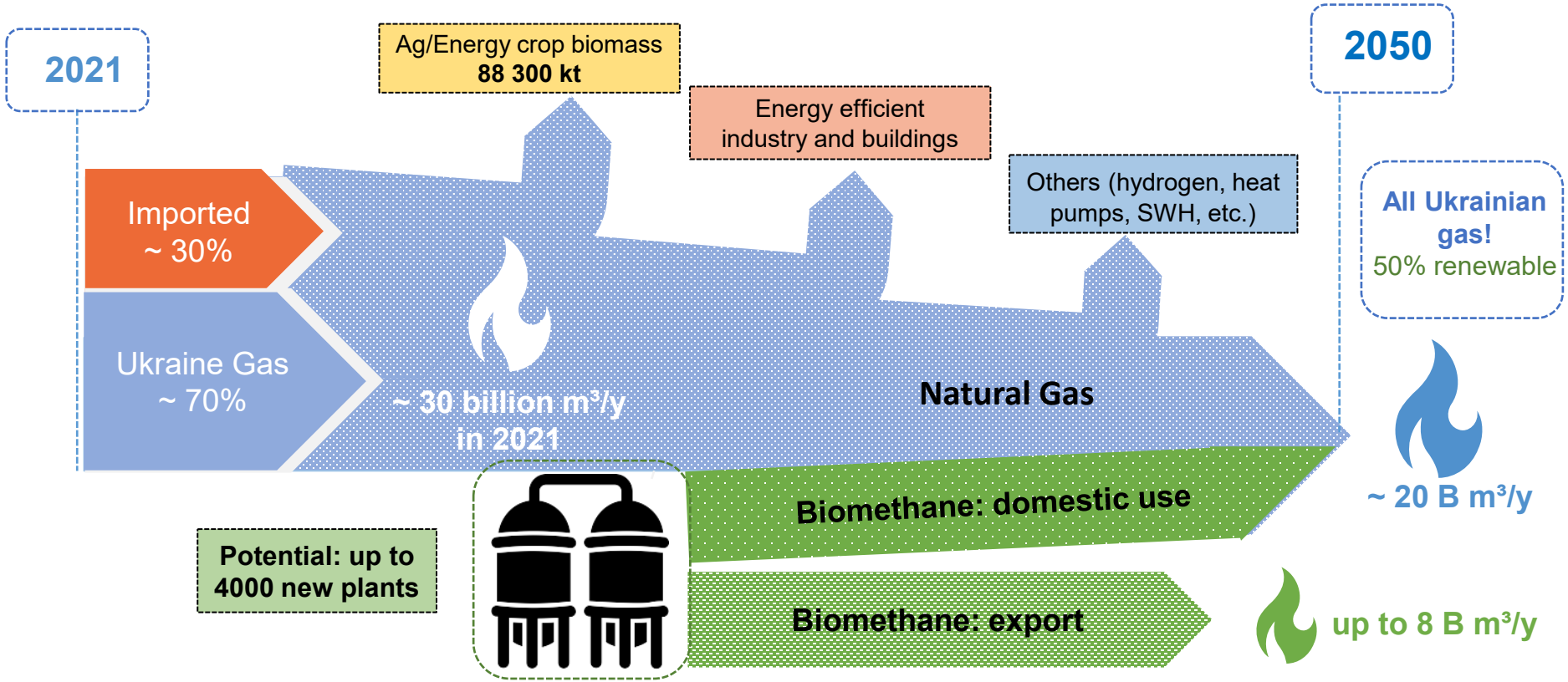
Cases reports as **business models** that include CAPEX, OPEX, payback

multi-stakeholder dialogue with market participants



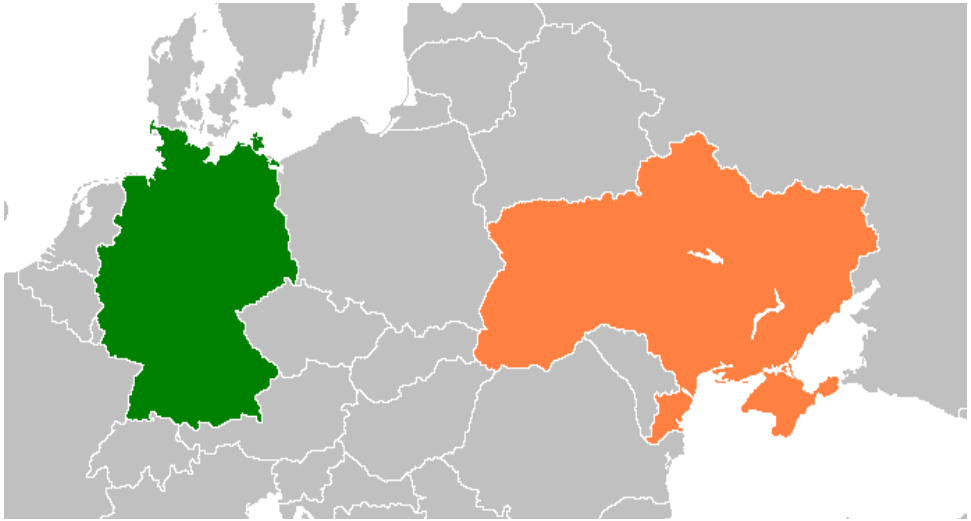
Draft laws for bioenergy sector and **investment roadmap** for investors

Proposed Scenario for Natural Gas Replacement by 2050*



Ukraine's HUGE Potential for Energy from Agri-food Waste

9500 plants = 5000 MW



51 plants = 100 MW+

Up to 8 billion m^3 for export per year

up to **1500-2000 MW** for domestic use

Biogas plants are capable of producing a strategically important resource – «green» biomethane and electricity, especially maneuverable or peak.

Food and Agriculture Organization
of the United Nations

FAO Ukraine: Ongoing and Hopeful Renewable Energy Work

Bioenergy Can Potentially Remediate Contaminated Lands

The use of biomass to remediate contaminated lands is an alternative sustainable and renewable source of energy and is among the FAO priorities to support agriculture and forestry in the country

Energy For Food (E4F): New Joint Project (hoped!)

Four Components:

- Policy
- Research
- Investments & Communication
- Procurement & Training

Place-scale **biogas, solar and wind plants** for the agriculture sector

Energy For Food: New Joint Project (hoped!)

Small/medium biomass waste digesters for agri-food industries

Bioenergy on land not suitable for food crops

Energy efficient grain dryers and solid biomass heat generators (including energy crops)

Thank You from Ukraine