

Environmental sustainability of biofuels in energy transition for a Green Economy in Ukraine

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Energy transition for a Green Economy

UNEP defines the **green economy** as one that results in **improved human well-being** and **social equity**, while significantly **reducing environmental risks** and **scarcities**. It is **low carbon**, **resource-efficient**, and **socially inclusive**.

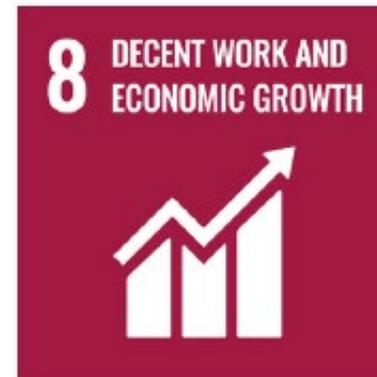
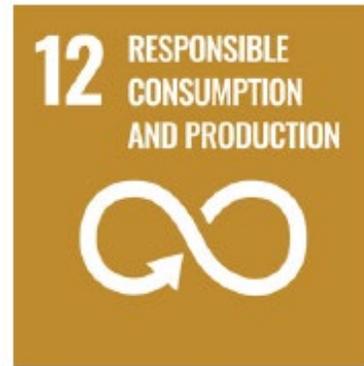
Protects biodiversity and ecosystems

Recognizes natural capital

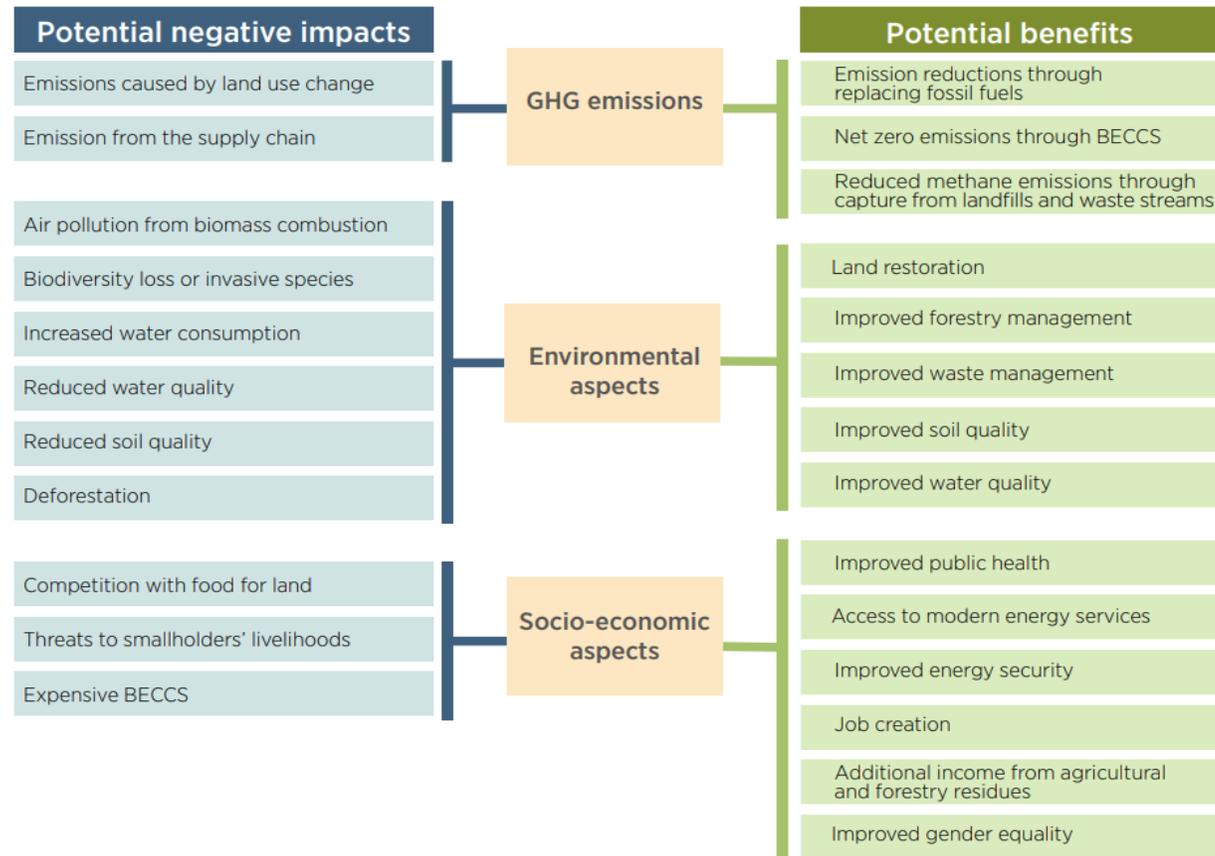
Delivers poverty reduction, social protection and access to essential services

Bioenergy and Sustainable Development Goals

If applied correctly, bioenergy development could contribute to achieving the SDGs



Bioenergy sustainability: Potential impacts of biofuel production



Source: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Aug/IRENA_Bioenergy_for_the_transition_2022.pdf?rev=875a997481f04168b17499f1e5dc1473

The Case of Ukraine: sustainable agricultural biomass

Biofuel production from excess amounts of food/feedstock is a relevant option in Ukraine case due to large areas of agricultural land.

Additionally, there are about 4 million hectares of unused agricultural land. It can be partly engaged in growing energy crops for production of all types of biofuels – solid, liquid, and gaseous.

Recommendations:

- To introduce **mandatory criteria of sustainability** in the production of biofuels into Ukrainian legislation.
- To **harmonize** national **standards** with international standards.
- To trigger a **multi-stakeholder dialogue**: government, international development/financial institutions, farmers & project developers.

UN cooperation in Ukraine: Next phase

UNEP's role in the next phase of a bioenergy project:

- Development of energy biomass in territories unsuitable for the agricultural cycle through:
 - **Assessing bioenergy potential** of temporarily **un-arable lands**
 - **Identifying priority locations** for bioenergy development and **main barriers** in transition to a green economy
 - **Mobilizing sustainable agro-biomass** for energy supply through analysis of soil contamination and phytoremediation potential.

Thank you



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