

<u>Practice Abstract 2: Measuring Sustainability on Farms – Key Indicators for</u> <u>Renewable Energy Integration</u>



SHORT TITLE IN ENGLISH

Practice Abstract 2: KPIs for Performance Monitoring.

COUNTRY AND CLIMATIC ZONE

Pan-European

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3 BENEFITS OF THE PRACTICE

- Provides a comprehensive framework for monitoring sustainability in agrocommunities.
- Aligns with EU-level monitoring frameworks to ensure comparability and relevance.
- Supports continuous improvement through standardised indicators and conflict analysis.

PRODUCTION SYSTEM

N/A

KEYWORDS

HarvRESt, KPIs, RES

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH





HarvRESt has developed a set of Key Performance Indicators (KPIs) to help farmers and agro-communities track their performance not only in terms of productivity but also sustainability. These KPIs cover areas such as environmental impact, energy use, and economic outcomes. They are tailored to real farming operations and supported by clear data guidelines, making it easier for practitioners to monitor progress and make informed decisions when integrating renewable energy into agriculture.

LONGER DESCRIPTION – IN ENGLISH

The HarvRESt project aims to support a more sustainable and competitive agricultural sector through renewable energy integration. A core part of this goal is the ability to accurately characterise and monitor farm performance across production, environmental, economic, and social dimensions. To this end, HarvRESt has defined a comprehensive set of Key Performance Indicators (KPIs) aligned with European Commission Monitoring Frameworks and tailored to real-world farming operations.

These KPIs were selected through a rigorous process that considered HarvRESt's diverse Use Cases, core project pillars, and previous EU-funded work in the agricultural and energy domains. The final deliverable, *HarvRESt Monitoring KPIs for Use Cases*, categorises the indicators across five domains:

- Agricultural output
- Economic performance
- Energy production and consumption
- Environmental impact
- Social well-being

Each KPI includes a detailed definition, data requirements, calculation methods, and units. A traceability matrix maps each indicator to the relevant Use Cases, enabling practitioners to assess progress at the farm level and across the project.

To ensure reliability and consistency, HarvRESt also outlines steps for standardising data collection and pre-processing. Additionally, a preliminary conflict matrix identifies potential trade-offs between KPIs, laying the foundation for future analysis and decision-making.

This structured KPI set is designed as a dynamic tool for continuous improvement, enabling agro-communities to benchmark, evaluate, and adapt their integration of renewable energy sources over time.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description: HarvRESt Monitoring KPIs for Use Cases (forthcoming deliverable)

URL: <u>https://harvrest.eu/media/5z1nlokb/harvrest_d22_monitoring-kpis-for-use-cases_suite5.pdf</u>

