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## **METHODOLOGY FOR MONITORING ECONOMIC INDICATORS IN ECO-INDUSTRIAL PARKS.**

The methodology for monitoring economic indicators in Eco-Industrial Parks (EIPs) involves a systematic approach to collect, analyze, and report data that reflects the park's economic performance and sustainability [1].

Methodology for Monitoring Economic Indicators in EIPs includes:

1. Determining the goals and scope of implementation of economic indicators:

Industrial Parks (IP) management company should clearly define the objectives of the monitoring system (e.g., the possibility of promoting local businesses and SMEs, creating jobs, generating economic benefits, determining the financial viability of the park) [2].

2. Identify Key Economic Indicators:

Select relevant indicators that align with the park's economic, environmental, and social goals. Indicators should include resource efficiency, economic output, cost savings, employment, and other relevant metrics.

3. Develop a Data Collection Plan:

Data Sources: Identify data sources, which may include company reports, sensor data, audits, surveys, and third-party data.

Data Collection Methods: Use appropriate methods such as direct measurements (sensors), questionnaires, interviews, and secondary data from reports.

Data Frequency: Establish how often data will be collected (e.g., monthly, quarterly, or annually).

4. Industrial park data management systems:

Use data management tools on the IT tools platform, register an IP cabinet, update fleet data, send reports every 6 months and store all data, this will ensure data security, quality control and compliance with data protection regulations.

5. Data processing and analysis:

Use analytical tools to process raw data into meaningful information. Techniques can include statistical analysis, data normalization, and trend analysis. Advanced analytics can identify patterns, predict trends, and optimize operations [3].

6. Benchmarking and Performance Evaluation:

Compare the IP performance against benchmarks or targets set based on Standard, International Framework EIPs. Evaluate the data to identify areas of improvement, highlight successful practices, and measure progress toward objectives.

7. Monitoring and Reporting:

Use dashboards, charts, and reports to visualize the data, making it accessible and understandable for stakeholders:

- » Information on financing the industrial park's territory development.
- » Information about the industrial park participants.
- » Information about other entities within the industrial park.
- » Information on job creation within the industrial park.
- » Information on the state incentives received by the industrial park.

» Information on the cost of manufactured and exported products within the industrial park.

**8. Stakeholder Engagement:**

Involve stakeholders such as companies within the park, government bodies, and community representatives in the monitoring process. Ensure transparency and encourage stakeholders to provide input on the system's effectiveness.

**9. System Evaluation and Upgrades:**

Periodically review and assess the monitoring system's effectiveness, including evaluating data accuracy, system performance, and alignment with park goals.

**References:**

1. A Practitioner's Handbook for Eco-Industrial Parks implementing the international EIP Framework. available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/30458/A%20Practitioners%20Handbook%20for%20Eco-Industrial-Parks..pdf?sequence=8&isAllowed=y>
2. Tulchynska, S., Shevchuk, N., Kleshchov, A., Kryshchop, I., Zaburmekha, Ye. (2021). The Role of Higher Education Institutions in the Development of EcoIndustrial Parks in Terms of Sustainable Development. *IJCSNS International Journal of Computer Science and Network Security*, Vol. 21 No. 10 pp. 317-323. <https://doi.org/10.22937/IJCSNS.2021.21.10.45>
3. Shevchuk, N., Kleshchov, A., Tulchynska, S. (2024). Digitalisation of the Ukrainian industrial parks sector. *Економічний вісник НТУУ «Київський політехнічний інститут»*. № 30. <https://ev.fmm.kpi.ua/article/view/314274/305156>