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# European Week for Waste Reduction: Enhancing synergies to improve sustainability of resource use in groups of industries

## Lessons from International EIP Framework promotion in **Belarus and Moldova**

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# Eco-Industrial Parks – A brief Introduction



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## What is an Eco-Industrial Park?

*"A community of manufacturing and service businesses located together on common property. Member businesses seek **enhanced environmental, economic, and social performance** through **collaboration** in managing environmental and resource issues.*

*By working together, the community of businesses seeks a **collective benefit** that is greater than the sum of individual benefits each company would realize by only optimizing its individual performance."*

(Lowe, 2001)



**In short, the EIP concept is about creating more resource-efficient and cost-effective industrial parks which are more competitive, attractive for investment and risk resilient.**





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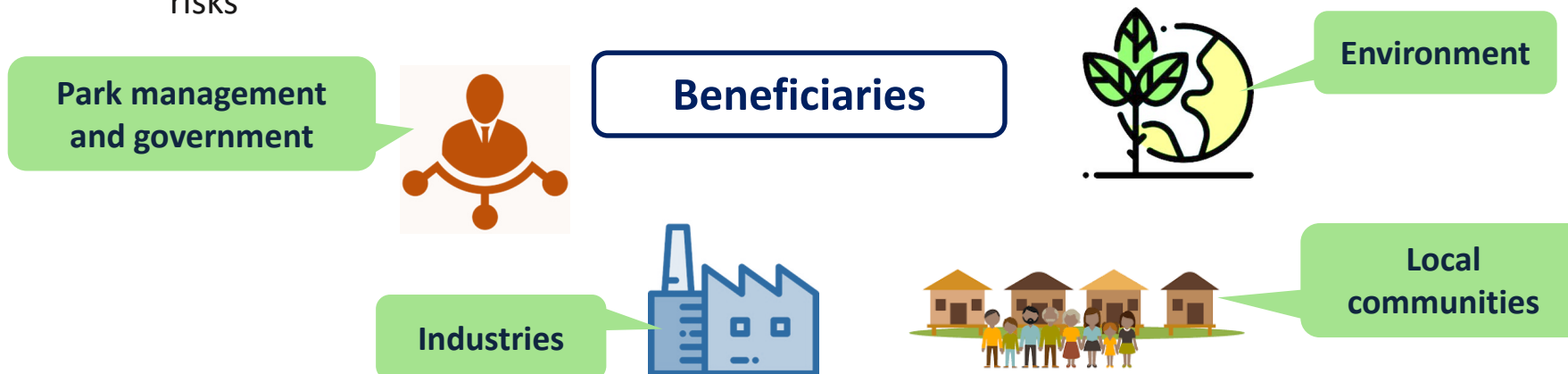
## Key benefits of EIPs

### Reduce:

- Use of materials, water, energy
- Procurement costs
- Waste
- Greenhouse gases
- Pollutants
- Environmental, economic and social risks

### Increase:

- Competitiveness, profitability and foreign investment
- Good-quality jobs
- Workers health and safety
- Quality of life for communities
- Access to new technologies and finances
- Resilience and business continuity



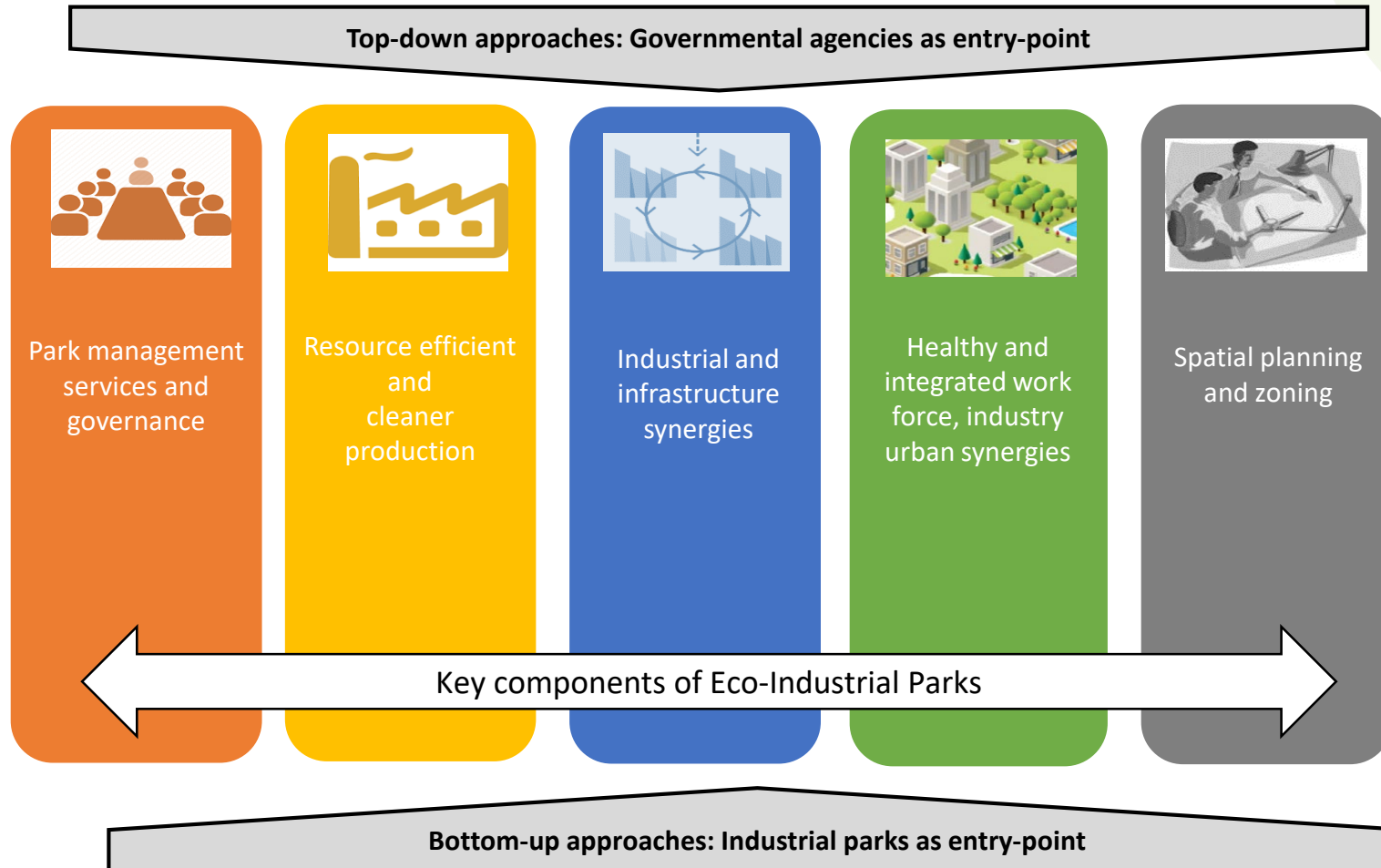


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## Key components of Eco-Industrial Parks





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# Lessons from EIP Framework Promotion in Belarus and Moldova

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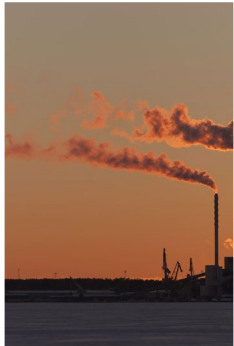


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## Engagement of IPs/FEZ in the two partner countries



### Moldova

- IP Tracom
- FEZ Valkanes



### Belarus

- FEZ Minsk
- FEZ Mogilev

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# Key Topics Covered



**Park Management**

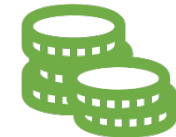


**Environmental Improvement**

Resource Efficiency & Cleaner Production  
Industrial Symbiosis



**Social contribution**



**Economic empowerment**

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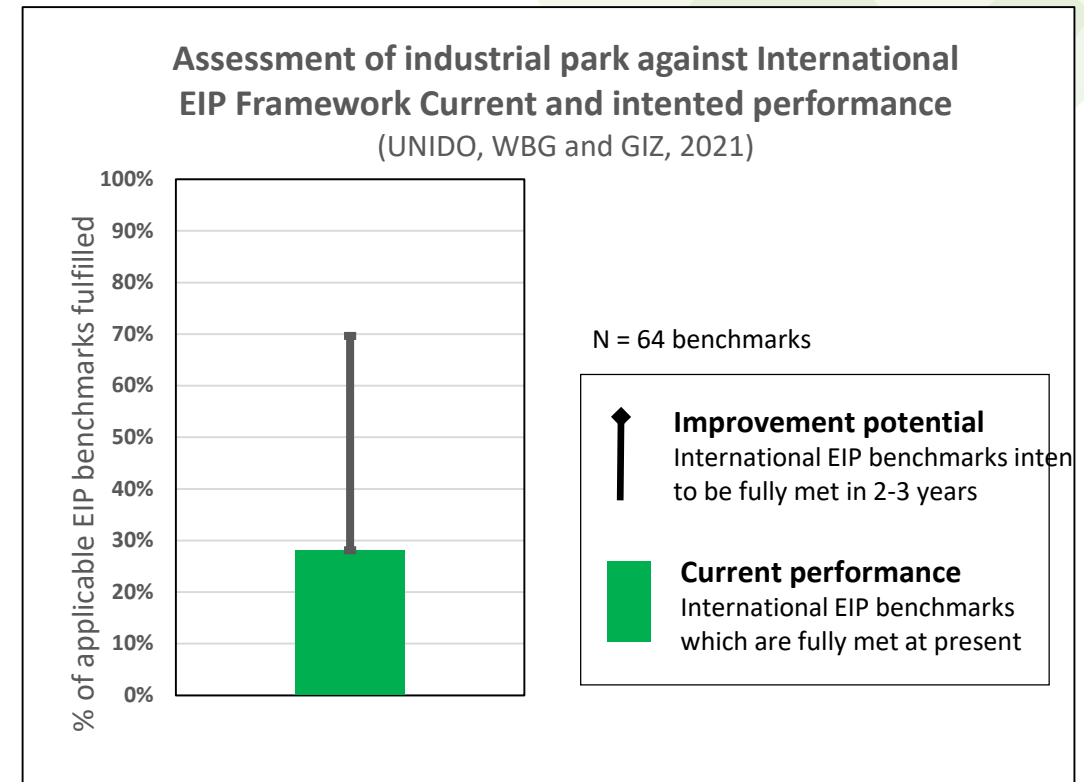
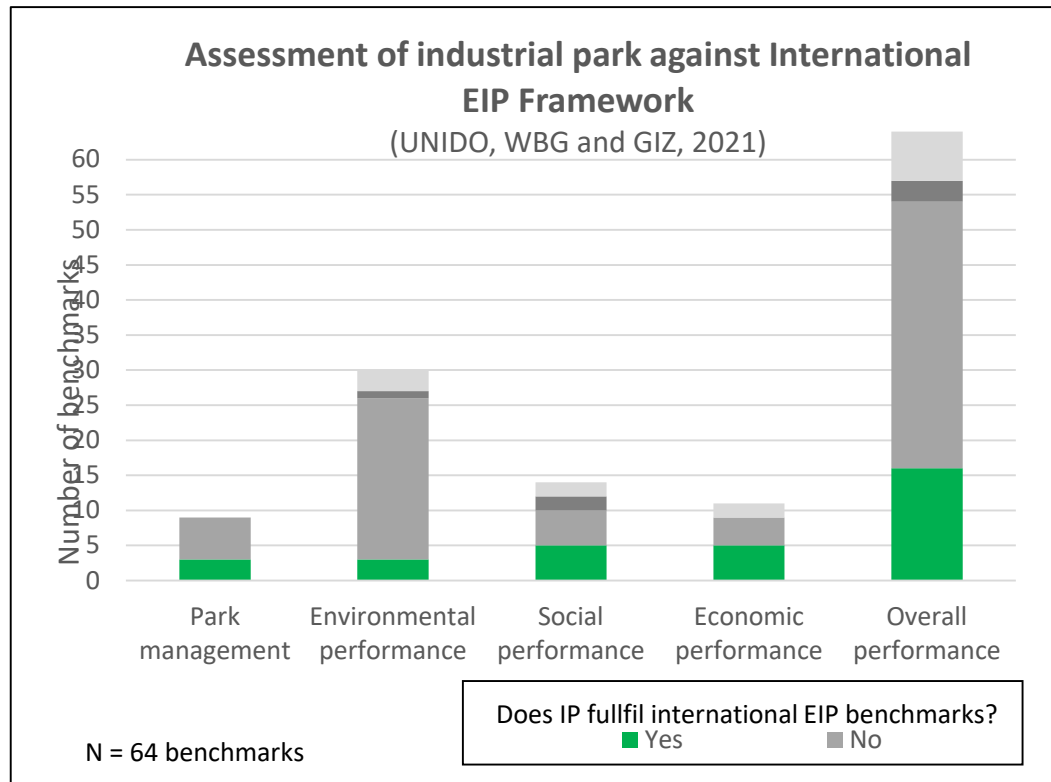
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# Results from EIP Assessment (example)



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# EIP Assessment: Lessons Learnt..

1. IPs/FEZs have significant potential for improvement
2. Willingness to participate and contribute seen from management/administration as well as IP/FEZ tenants/residents
3. Technical support lacking – provided through this activity
4. The International Framework for EIP a significant tool for identifying relevant opportunities
5. Programme can be scaled and replicated to other IPs as well as EaP countries
6. Time and resources are two major constraints faced by IP administration and tenants to address EIP/RECP/IS

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## Waste Reduction business cases (RECP and IS Opportunities)

- production of vegetable **nets from HDPE waste** (canisters, crates, barrels, etc.), generated in FEZ Minsk;
- implementation of Smart Crusher technology for recycling **construction waste** with the production of cement, sand, gravel and their use in the **production of asphalt concrete and reinforced concrete products** in FEZ Minsk;
- use of **glycerin** (a by-product of chemical production) for the production of **pharmaceutical glycerin and coolants** in FEZ Mogilev;
- production of **fuel pellets** from the waste of wood processing plants in FEZ Mogilev.



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## Waste Reduction business cases (RECP and IS Opportunities)



- creation and maintenance of **database of secondary resources** (raw materials, water, energy) generated in FEZ;
- **resource efficiency expertise** of pre-investment documentation of new investment projects to identify opportunities for resource efficiency improvements and industrial symbiosis in FEZ;
- **technical workshops** to assist FEZ residents in exchange of information on demand and supply of by-products and in elaborating of own circular economy projects;
- express **recourse efficiency audits** of residents' and park's facilities.

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# Waste Reduction (RECP/IS): Lessons Learnt..(opportunities)

1. See waste beyond its physical state – can include energy, GHG, and even time.
2. Companies aware and pro-active about their waste streams. Administration could/should collect regular data (types of waste and quantities) through waste mapping exercises
3. Through the RECP and IS exercises/workshops conducted with all the IPs, a number of opportunities for waste management have been identified. Administration should continue engaging tenants and identifying opportunities for collaboration/synergies
4. RECP and IS identification toolkits shared with the IPs. These tools could be extremely beneficial for better waste management
5. Opportunity for government, IPs and industries (along with knowledge institutions) to collaborate on RECP/Waste
6. Setting up a waste handling/management company within each of the IPs, supported by the government

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## Waste Reduction (RECP/IS): Lessons Learnt.. (barriers)

1. Limited control and knowledge on waste reuse/recycling, especially on hazardous waste
2. In most cases, IP Master plans (where existing) do not cover waste management and handling
4. Lack of good waste management organisations that can support good waste management practices and opportunities
5. Lack of strong legislation to support best practices in waste management

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Thank you

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