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PROGRESS REPORT IN 2022 ECO-INDUSTRIAL PARK INTERVENTION IN VIET NAM – PERSPECTIVE FROM GLOBAL ECO-INDUSTRIAL PARKS PROGRAMME





PART I. Tasks at the 2022 Project Steering Committee meeting

4 tasks assigned in Notice No. 34/TB-BKHĐT dated 22/6/2022 on the conclusion of the Project Steering Committee meeting

1. Support the development of policies related to eco-industrial parks:

- Research, remove barriers in reusing waste and wastewater;
- Integrating eco-industrial parks into circular economy implementation solutions, the National Strategy on Green Growth 2021-2030, vision 2050; solutions to implement commitments at COP 26; guidance on the implementation of eco-industrial parks in relevant documents.

PART I. Tasks at the 2022 Project Steering Committee meeting

2. Promote technical support activities for eco-industrial parks:

- Promote support activities for eco-industrial parks (resource efficiency, cleaner production, industrial symbiosis);
- Comply with the requirements and conditions of the domestic eco-industrial park and aim for international standards.



PART I. Tasks at the 2022 Project Steering Committee meeting

3. Strengthen training on eco-IPs:

Training, improving legal capacity and technical implementation of eco-industrial parks for subjects:

- + State management agencies (central, local);
- + Investors developing industrial park infrastructure;
- + Secondary enterprises in industrial parks

4. Promote communication, dissemination and awareness raising activities about eco-IPs.



PART II. PROGRESS REPORT – OUTCOME 1

Task 1. Support the development of policies related to eco-industrial parks

Output 1.1: Mapping of existing capacity of institutions and service providers on EIP

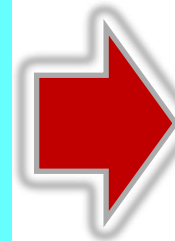
ACTIVITY

Act 1.1.1: Policy analysis and update of stakeholder mapping

Develop the Report on monitoring, reporting and verification (MRV) for EIP indicators

RESULT

- Stakeholders include agencies involved in policymaking, financial institutions, and experts.
- (I) Review the scope of stakeholders' mandates; (ii) identify information required by indicators; (iii) information that is not available and needs to be collected; and (iv) suggest trainings and capacity development needs for the



PART II. PROGRESS REPORT – OUTCOME 1

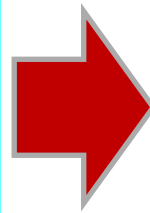
Task 1. Support the development of policies related to eco-industrial parks

Output 1.2: Strengthen national institutions relevant to EIP policy development and implementation

ACTIVITY

Act 1.2.1: Facilitation of inter-ministerial dialogue to draft circulars to operationalize Decree 82/2018/NĐ-CP

- Contributions to advising the legal parties involved.
- Organised exchange knowledge course on EIP for members of inter-ministerial working group.



RESULT

- Contributing relevant contents on EIP topic in Decree 35/2022/NĐ-CP
- The delegation consisted of 7 members participating in an intensive training course on eco-industrial park in Switzerland.
- The project continues to support research in the draft Circular of Decree 35/2022/NĐ-CP

PART II. PROGRESS REPORT – OUTCOME 1

Task 1. Support the development of policies related to eco-industrial parks

Output 1.2: Strengthen national institutions relevant to EIP policy development and implementation

ACTIVITY

Act 1.2.2: EIP related legislation review, gap analysis and recommendations

Support the activities of the group of experts to develop policies for EIPs



RESULT

- Develop guidelines for reuse of industrial solid waste, propose steps to reuse solid waste in industrial parks to implement industrial symbiosis towards to circular economy in accordance with the Law on Environmental Protection 2020 and Decree 08/2022/NĐ-CP.
- An International Water Regulation Expert has been recruited to support Water Resources Institute (WRI), MONRE to propose regulations on water management to Contribute to the draft Guidance Decree the Amended LWR 2015 and to implement industrial symbiosis in industrial zones towards a circular economy.

PART II. PROGRESS REPORT – OUTCOME 1

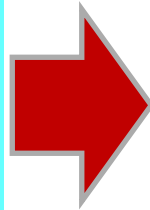
Task 1. Support the development of policies related to eco-industrial parks

Output 1.2: Strengthen national institutions relevant to EIP policy development and implementation

ACTIVITY

Act 1.2.4: Development of EIP index and related basic database of IPs involved in the project which will be integrated in a broader MPI IZ database

Develop a set of indicators on EIPs to monitor the implementation and transition to EIPs in Vietnam, acting as a foundation to measure the progress of transformation and construction of EIPs.



RESULT

- Survey at 4 industrial zones and 88 other enterprises to propose the set of indicators.
- Consultation Workshop was held with the participation of 69 representatives from industrial park management boards and developers to comments on the applicability, practicality and relevance of the proposed set of EIP indicators.
- Proposed 23 indicators to evaluate the performance of EIPs (4 indicators on industrial park management, 7 social indicators, 6 economic indicators, 6 environmental indicators) of which, 20 mandatory indicators and 3 optional indicators.

PART II. PROGRESS REPORTS – OUTCOME 1

Task 3 and Task 4. Strengthen training on eco-IPs and Promote communication, dissemination and awareness raising activities about eco-IPs

Output 1.2: Strengthen national institutions relevant to EIP policy development and implementation

ACTIVITY

Act 1.2.3: Policy information dissemination

Seminars, exchange of experiences and websites to disseminate policy information on EIPs



RESULT

- Workshop "Eco-industrial park development in Vietnam: Policies and implementation solutions" on September 15, 2022 in Ho Chi Minh City to disseminate new contents of Decree No. 35/2022/NĐ-CP with a policy mechanism to encourage the construction and transformation of EIPs.
- IP tour and exchange of experiences in eco-industrial zones transition in Amata Bien Hoa Industrial Park, Dong Nai on September 16, 2022 with the participation of 50 delegates from the Ministries of Planning and Investment, UNIDO, SECO,...
- The website has been developed to disseminate information, events, activities of the project, references, technical instructions on the transformation of EIPs.

PART II. PROGRESS REPORTS – OUTCOME 2

Task 3 and Task 4. Strengthen training on eco-IPs and Promote communication, dissemination and awareness raising activities about eco-IPs

Output 2.2: Benchmarking and in-depth analysis of potential candidate industrial parks for EIP intervention

ACTIVITY

Act 2.2.1: Capacity building and advisory services in selected industrial parks

Strengthening the capacity to implement EIP transition by supporting technical, economic and financial solutions.



RESULT

- Workshop: Strengthening capacity on resource efficiency for industrial parks directly and online in 3 industrial parks with 190 participants.
- Industrial symbiosis workshop held in Hai Phong (Deep C Industrial Park), (Hiep Phuoc Industrial Park) and Dong Nai (Amata Industrial Park) with the participation of 160 delegates.
- Workshop: Introducing the EIPs model for industrial parks to raise awareness of eco-IPs across the country with 366 delegates (275 men and 91 women) participating.
- EIP Financial Access Tool (A2F).
- Conducting training on financial instruments (A2F) with the participation of more than 130 participants from tenants, developers (Deep C, Hiep Phuoc, Amata) and PMAs.

PART II. PROGRESS REPORTS – OUTCOME 2

Task 2. Promote technical support activities for eco-industrial parks

Output 2.3: EIP requirements implemented by park management and tenant companies

RESULT

ACTIVITY

Act 2.3.1: Rapid RECP assessment for businesses and feasibility study

RECP assessment for 3 industrial parks (DeepC, Hiep Phuoc, Amata) participating in the project.



- RECP assessment for 51 companies (DeepC, Hiep Phuoc, Amata), proposed 396 RECP solutions;
- Total potential power saving: 34,436,469 kwh/year;
- Potential water saving 252,548 m3/year;
- CO2 emission reduction (excluding the implementation of solar solutions) is 28,823 tons of CO2 per year;
- Savings of 85,553 million/year (excluding savings benefits from solar energy solutions).

PART II. PROGRESS REPORTS – OUTCOME 2

Task 2. Promote technical support activities for eco-industrial parks

Output 2.3: EIP requirements implemented by park management and tenant companies

ACTIVITY

Act 2.3.2: Identification of industrial synergies and EIP improvement opportunities in selected IPs

Industrial symbiosis and urban industrial symbiosis opportunities

- Survey to identify potential industrial/urban symbiosis opportunities
- Feasibility study to propose implementation of potential industrial/urban symbiosis opportunities



RESULT

DEEP C Industrial Park

- Urban industrial symbiosis: 6 potential opportunities
- Industrial symbiosis: 14 potential opportunities

Hiep Phuoc Industrial Park

- Urban industrial symbiosis: 7 potential opportunities
- Industrial symbiosis: 14 potential opportunities

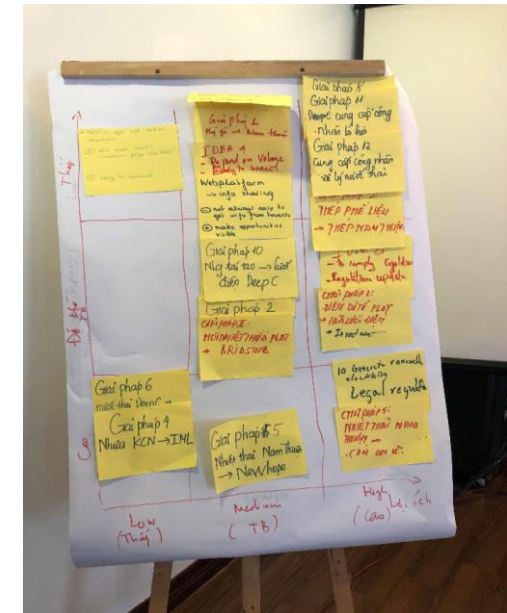
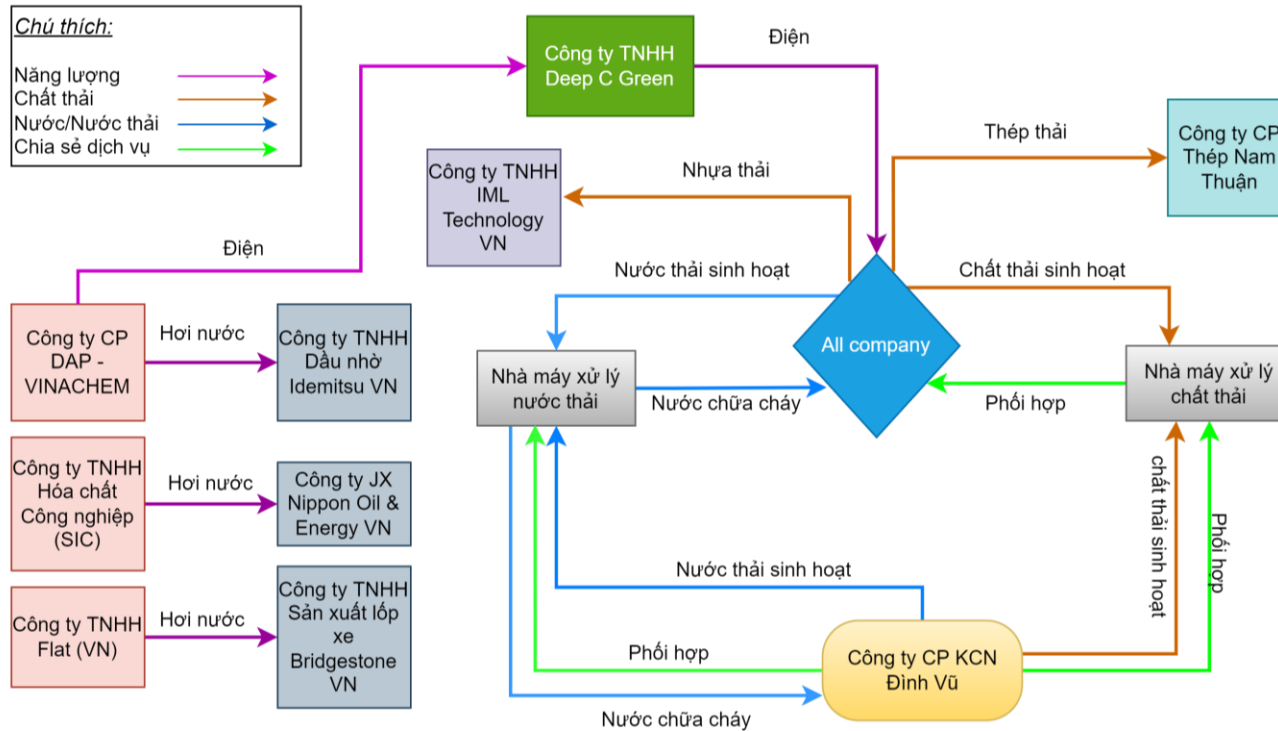
Amata Industrial Park

- Urban industrial symbiosis: 7 potential opportunities
- Industrial symbiosis: 13 potential opportunities

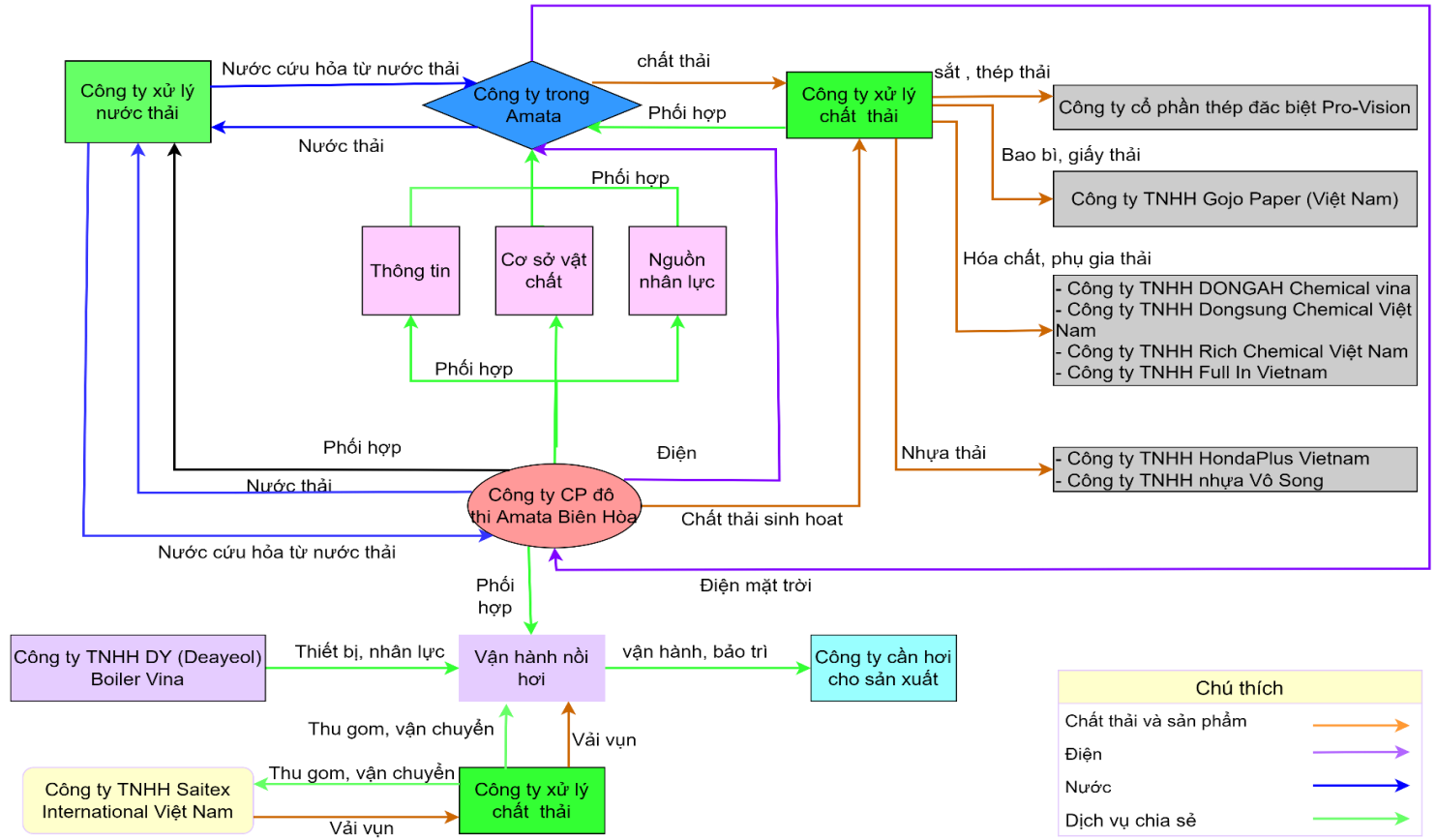
Task 2. Promote technical support activities for eco-industrial parks

Act 2.3.2: Identify symbiotic networks and opportunities for improvement in the direction of EIPs in selected IPs

Deep C Industrial Park



Amata Industrial Park

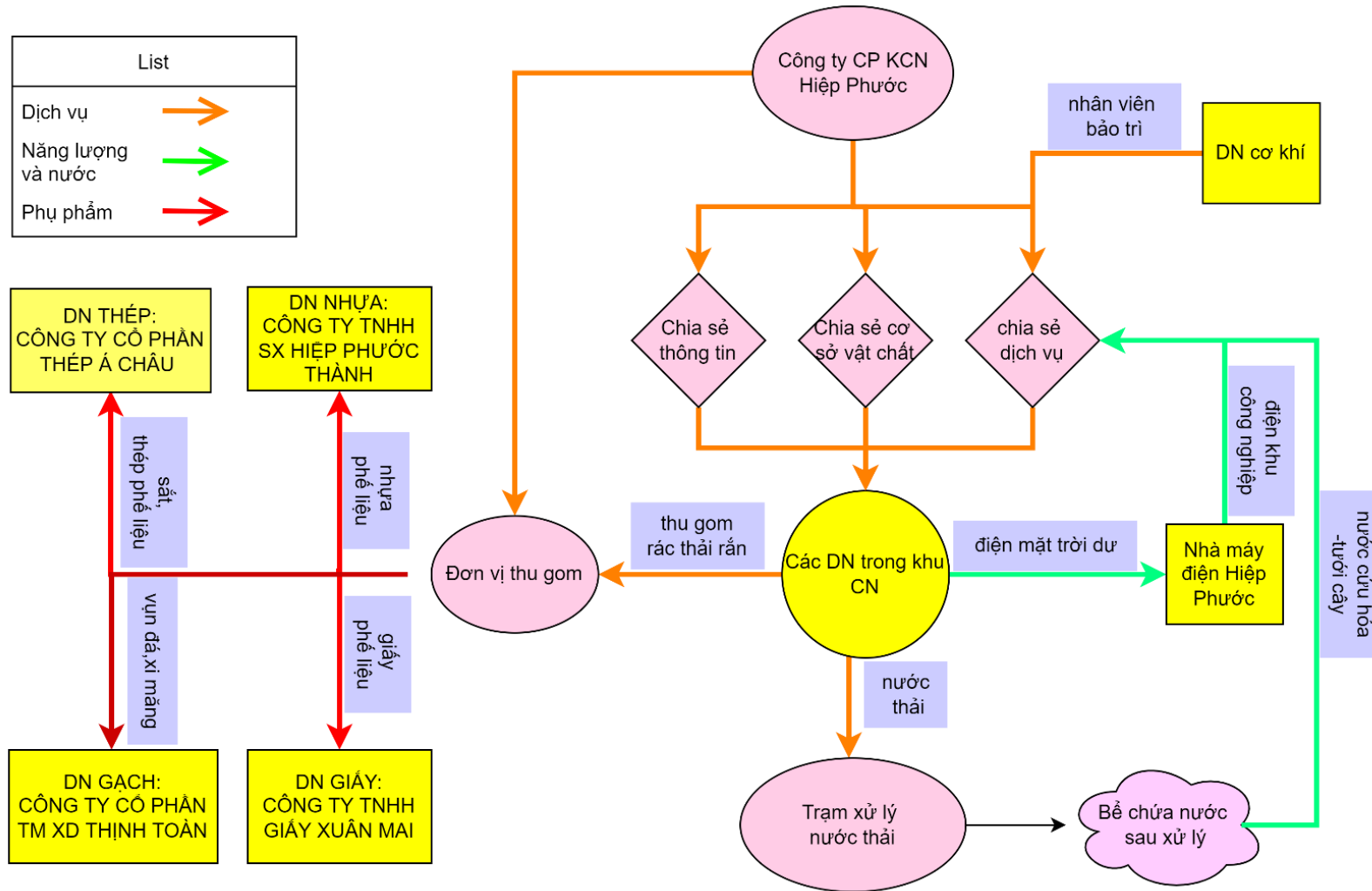


Độ khó khi thực hiện giải pháp	Đễ dàng	(11)	(5), (7), (8), (9), (12)	(1), (2)
	Trung bình			
	Khó khăn	(5.1), (10)		(3), (4), (6)
		Thấp	Trung bình	Cao
Lợi ích khi thực hiện cơ hội cộng sinh công nghiệp				



Task 2. Promote technical support activities for eco-industrial parks

Hiep Phuoc Industrial Park



PART II. PROGRESS REPORTS – OUTCOME 2

Task 2. Promote technical support activities for eco-industrial parks

Output 2.3: EIP requirements implemented by park management and tenant companies

ACTIVITY

Act 2.3.4: Continued support to business cases development and access to finance of most promising industrial synergies for GEF-SECO EIP project

Support to promote potential symbiotic solutions in 2 Industrial Parks Hoa Khanh and Tra Noc 1&2



RESULT

Tra Noc 1&2IP:

Reusing sludge from wastewater treatment plants

Sharing of biogas between companies/biogas usage for energy.

Hoa Khanh IP:

Use of wet brewer's grain for animal feed

Collecting paper waste from companies within Hoa Khanh IP by Tan Long Company

PART II. OUTCOME 2

Task 2. Implementation of Industrial symbiosis at Khanh Phu IP (Ninh Binh)

- As one of the industrial symbiosis solutions identified by UNIDO in the period 2018 -2019, the Ninh Binh Gas Company in Khanh Phu IP has now implemented a project to produce liquefied CO₂ by using input from the emission of the Ninh Binh Fertilizer Plant.
- This industrial symbiosis has been in operation for 2 years, and 6,000 m³ CO₂/hour are exchanged between the two companies. According to the investor's calculation, the use of the above input contributes to reducing over 74 Kt of CO₂ emission into the environment each year.



Nhà máy Đạm Ninh Bình





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