PLANNING OF NEW ECO-INDUSTRIAL PARKS

Workshop on Eco-industrial Park Development

15 September 2022

Dick van Beers, UNIDO

ESTABLISHMENT OF NEW ECO-INDUSTRIAL PARKS
BENEFITS

Beneficiaries

Park management & government

Environment

Industries

Local communities

- Better conditions to do business in park
- Better access to new technologies and finances
- Lower economic, environmental, social risks
- Increased quality of life for communities
- Lower costs through optimisation and sharing
- Minimized green house gas emissions and pollutants
- Stronger collaborations between companies and park management
- Reduced use of raw materials, water, energy and chemicals
- Attract investors and create skilled jobs
- Improved workers health and safety

Economic, environmental and social benefits
Environmental and social risks are economic risks!

ESTABLISHMENT OF NEW (ECO-)INDUSTRIAL PARKS
COMMON CHALLENGES

Common planning challenges facing industrial parks:

- No up-to-date Master Plan - Master Plan is more than just a lay-out map!
- Unique value proposition for industrial park is not clear
- Park is planned based on unrealistic market demands
- Insufficient consideration of economic, environmental and social aspects
- Lack of stakeholder engagement in park planning
- Limited consideration of industry clustering and synergies
- Limited integration of utilities and infrastructures
- Buffer zone is not planned or secured properly
- Lack of consideration of long-term development scenarios (e.g. Urban encroachment, new technologies, types of companies)

Eco-industrial park approaches help to address these challenges

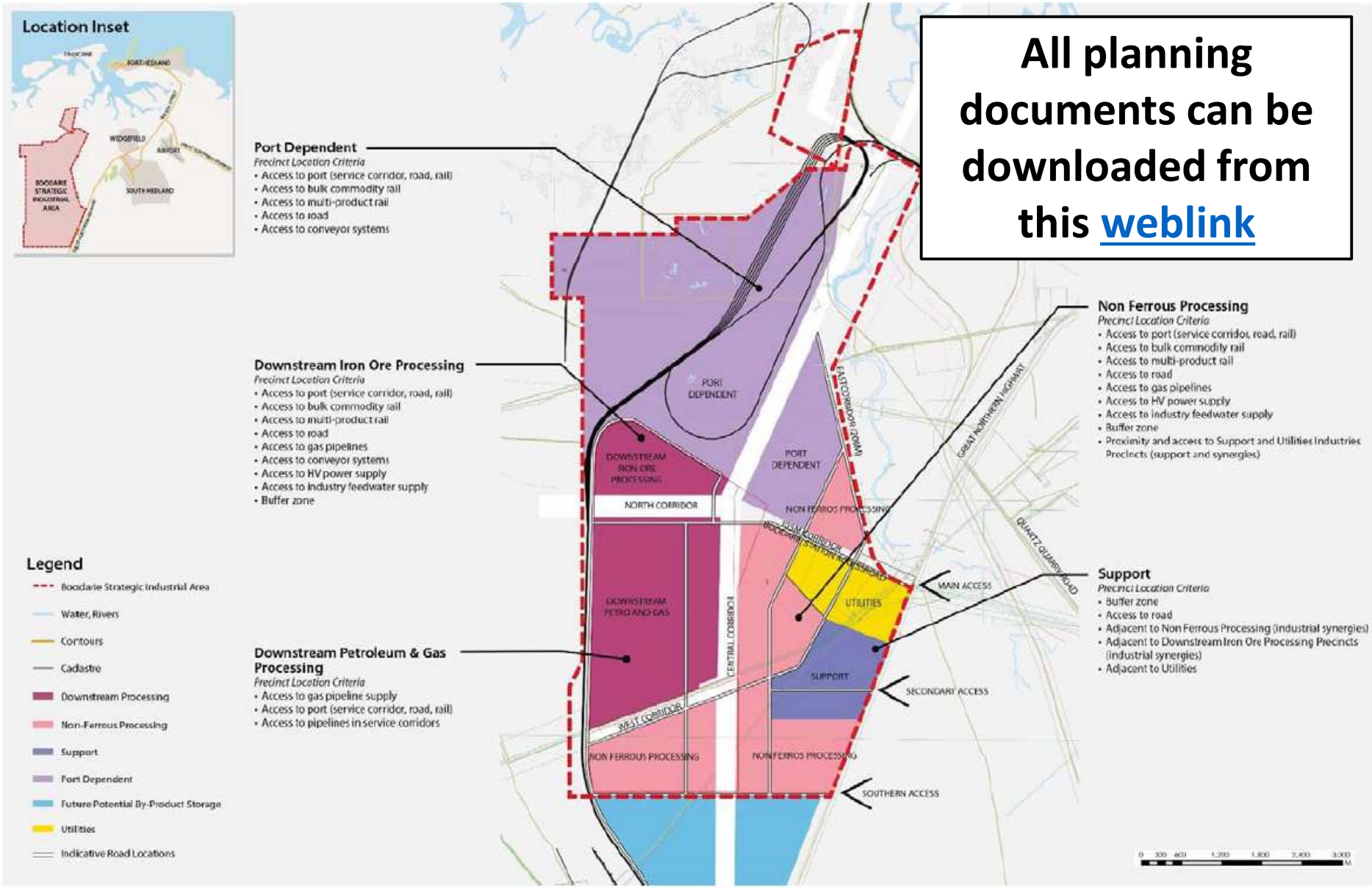
Practical examples on next slides

ESTABLISHMENT OF NEW ECO-INDUSTRIAL PARKS
DETAILED CASE STUDY

Planning of Boodarie Strategic Industrial Area, Australia

Using EIP approaches to plan and design a better industrial park

- Assessment industry demand for land
- Forecasting industry inputs and outputs to guide infrastructure planning
- Centralised water, energy, by-product facilities
- Synergistic precincts and industry clustering
- And more….



All planning documents can be downloaded from this weblink

PLANNING OF BOODARIE STRATEGIC INDUSTRIAL AREA, AUSTRALIA
FORECAST INDUSTRY INPUTS AND OUTPUTS

#	Potential industry types	Total area	Direct employment			POTENTIAL KEY INPUTS						POTENTIAL KEY OUTPUTS		
			Total	'White collar'	'Blue Collar'	Power	Gas	Domestic use of potable water	High quality industry feed water	Process & cooling water (lower quality)	Raw / source materials	Water discharge	Products	By-products / wastes
		Ha	persons	persons	persons	MW	TJ/a	ML/a (ktpa)	ML/a (ktpa)	ML/a (ktpa)	ktpa	ML/a (ktpa)	ktpa	ktpa
DOWNSTREAM IRON ORE PROCESSING														
1	Sintered iron plant	80	400	120	280	25	200	11	2,600	0	6,210	2,340	5,000	311
1	Iron ore pelletising plant	80	400	120	280	10	2,000	11	1,050	1,950	5,250	2,408	5,000	250
1	DRI / alternative smelting iron plant	140	400	120	280	60	50,000	11	2,100	3,900	5,250	4,815	2,000	726
1	Integrated steel making plant	120	400	120	280	80	50,000	11	3,500	6,500	6,072	8,025	2,000	730
1	Ferromanganese production plant	40	400	120	280	50	25,000	11	525	975	28	1,204	10	6
1	Ferrosilicon production plant	40	400	120	280	80	10,000	11	525	975	88	1,204	23	8
1	Iron carbide plant	20	400	120	280	20	10,000	11	1,400	1,100	2,000	2,085	1,000	500
Subtotal		**520**	**2,800**	**840**	**1,960**	**325**	**147,200**	**76**	**11,700**	**15,400**	**24,898**	**22,080**	**15,033**	**2,531**
DOWNSTREAM NON-FERROUS RESOURCE PROCESSING														
1	Magnesium production plant	50	400	120	280	8	10,000	11	700	1,300	262	1,605	100	16
1	Titanium production plant	60	400	120	280	145	1,000	11	1,400	2,600	112	3,210	50	11
1	Copper smelter	120	400	120	280	50	10,000	11	525	975	624	1,204	150	474
1	Silicon manganese production plant	50	400	120	280	25	10,000	11	525	975	115	1,204	38	24
1	Silicon metal production plant	50	400	120	280	25	10,000	11	525	975	77	1,204	15	9
1	Chlor-alkali plant	50	100	30	70	90	0	3	70	130	400	161	460	39
1	Aluminium smelter	120	400	120	280	170	10,000	11	1,050	1,950	281	2,408	100	17
1	Chromite processing plant (ferro-chromium production)	100	400	120	280	80	10,000	11	525	975	630	1,204	315	144
Subtotal		**600**	**2,900**	**870**	**2,030**	**593**	**61,000**	**79**	**5,320**	**9,880**	**2,502**	**12,198**	**1,228**	**733**
DOWNSTREAM PETROLEUM / GAS / COAL PROCESSING														
1	Methanol plant	50	100	30	70	1	28,000	3	875	1,625	595	2,006	800	125
1	Ammonia / urea plant	65	250	75	175	2	22,400	7	500	2,500	448	2,325	650	477
1	Ethane extraction	60	150	45	105	30	100,000	4	88	163	2,000	201	2,650	100
1	Ethane cracker	50	250	75	175	10	8,750	7	51	94	175	116	145	20
1	Ethylene dichloride (EDC) / Vinyl chloride monomer (VCM) plant	50	400	120	280	8	10,000	11	525	975	365	1,204	340	200
1	Sodium cyanide plant	25	100	30	70	1	10,000	3	525	975	34	1,204	15	2
Subtotal		**300**	**1,250**	**375**	**875**	**52**	**179,150**	**34**	**2,563**	**6,332**	**3,617**	**7,056**	**4,600**	**924**
PORT DEPENDANT														
1	Large scale processing plant (liquids - not defined)	120	400	120	280	80	10,000	11	350	650	3,413	803	3,250	163
1	Large scale processing plant (conveyors - not defined)	120	400	120	280	80	10,000	11	350	650	2,100	803	2,000	100
Subtotal		**240**	**800**	**240**	**560**	**160**	**20,000**	**22**	**700**	**1,300**	**5,513**	**1,605**	**5,250**	**263**
UTILITIES AND RESOURCE RECOVERY														
1	Gas fired power station (250 MW)	50	75	23	53	0	10,000	2	200	0	0	180	0	0
1	Gas fired power station (120MW)	25	50	15	35	0	5,000	1	100	0	0	90	0	0
1	Coal fired power station (800 MW)	100	200	60	140	0	0	5	450	2,000	802	1,905	0	30
1	Waste-to-energy and material recovery facility	10	25	8	18	0	2,500	1	100	0	252	90	Double counting	32
1	Industry feedwater facility	65	15	5	11	36	0	0.4	0	0	80,000	15,000	65,000	2
1	Energy facility (electricity, steam, heat, chill)	60	25	8	18	0	Double counting	1	Double counting	Double counting	0	Double counting	Double counting	0
Subtotal		**310**	**390**	**117**	**273**	**36**	**17,500**	**11**	**850**	**2,000**	**81,054**	**17,265**	**65,000**	**63**
GENERAL INDUSTRY														
64	General industries	160	960	288	672	26	2,080	26	1,280	1,280	1,680	2,112	1,600	80
Subtotal		**160**	**960**	**288**	**672**	**26**	**2,080**	**26**	**1,280**	**1,280**	**1,680**	**2,112**	**1,600**	**80**
NOXIOUS INDUSTRY														
20	Noxious industries	100	300	90	210	16	1,300	8	600	600	1,050	990	1,000	50
Total Boodarie Strategic Industrial Area - excl total BHP area		**2,230**	**9,400**	**2,820**	**6,580**	**1,207**	**428,230**	**257**	**23,013**	**36,792**	**120,313**	**63,306**	**93,711**	**4,643**

Source: GHD (2011). Industrial Ecology Strategy for Boodarie Strategic Industrial Area. Weblink

PLANNING OF BOODARIE STRATEGIC INDUSTRIAL AREA, AUSTRALIA
FORECAST INDUSTRY INPUTS AND OUTPUTS

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Purpose of forecasting is to guide:

- **Transport** (location and type of transport routes)
- **Engineering** (e.g. location and width of service corridors)
- **Planning work** (e.g. precincts, industry clustering, land uses)
- **Industrial synergies** (e.g. supply chain, by-product, utilities)

#	Potential industry types	POTENTIAL KEY INPUTS					
		Power	Gas	Domestic use of potable water	High quality industry feed water	Process & cooling water (lower quality)	Raw / source materials
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#	Potential industry types	POTENTIAL KEY OUTPUTS		
		Water discharge	Products	By-products / wastes
		ML/a (ktpa)	ktpa	ktpa
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ENCOURAGE INDUSTRIAL SYNERGIES

Master Plan to allow for development of synergy opportunities identified based on targeted industries

- Industry sectors may change over time, so may need to adjust planning accordingly

Consider all types of synergies in the planning of industrial parks

- Supply chain / utility / by-product / service / urban-industrial /synergies)

Assess implications from synergy opportunities on planning and design of industrial park

- Centralised “Utility Precinct” with energy/water/waste facilities
- Plan energy/water intensive industries around centralised utilities
- Allow for co-location of synergistic industries through precincts
- Separate organic and inorganic processing facilities
- Design service corridors to allow for potential pipelines and material movements between industries

PLANNING OF BOODARIE STRATEGIC INDUSTRIAL AREA, AUSTRALIA
DEFINING PRECINCTS AND INDUSTRY CLUSTERS

Illustrative example only – Not all-inclusive

ANZSIC - Short-listed industries		Potential to locate to BSIA (Low, Medium, High)	Industry location criteria											Recommended location within BSIA										
Code	Industry type		Risk		Transport						Water	Energy	Waste	Lot size										
			High risk profile	Industry co-location risk	Access to port	Access to bulk commodity rail	Access to multi-product rail	High wide loads	Access to conveyors	materials handling services	High water requirements	High energy requirements	Access to by-product/waste storage and processing	Large lots	Port Related and Material Intensive	Downstream Iron Ore Processing Precinct	Downstream Petroleum / Coal / Gas Processing Precinct	Resource Processing Precinct	Utilities	Non-Ferrous Resource Processing	General Industry Precinct	Noxious Industry Precinct	Buffer zone	Boodarie Support Area (east of BSIE boundary)
18	Basic Chemical and Chemical Product Manufacturing	High	XX	XX	XX	X	X			XX	XX	XX	X	XX	O			O						
19	Polymer Product and Rubber Product Manufacturing	Medium	X	X			X			X	X	X		X			O				O	O		
201	Glass and Glass Product Manufacturing	Low																			O			
202	Ceramic Product Manufacturing	Medium																O			O			

Source: GHD (2011). Industrial Ecology Strategy for Boodarie Strategic Industrial Area. Weblink

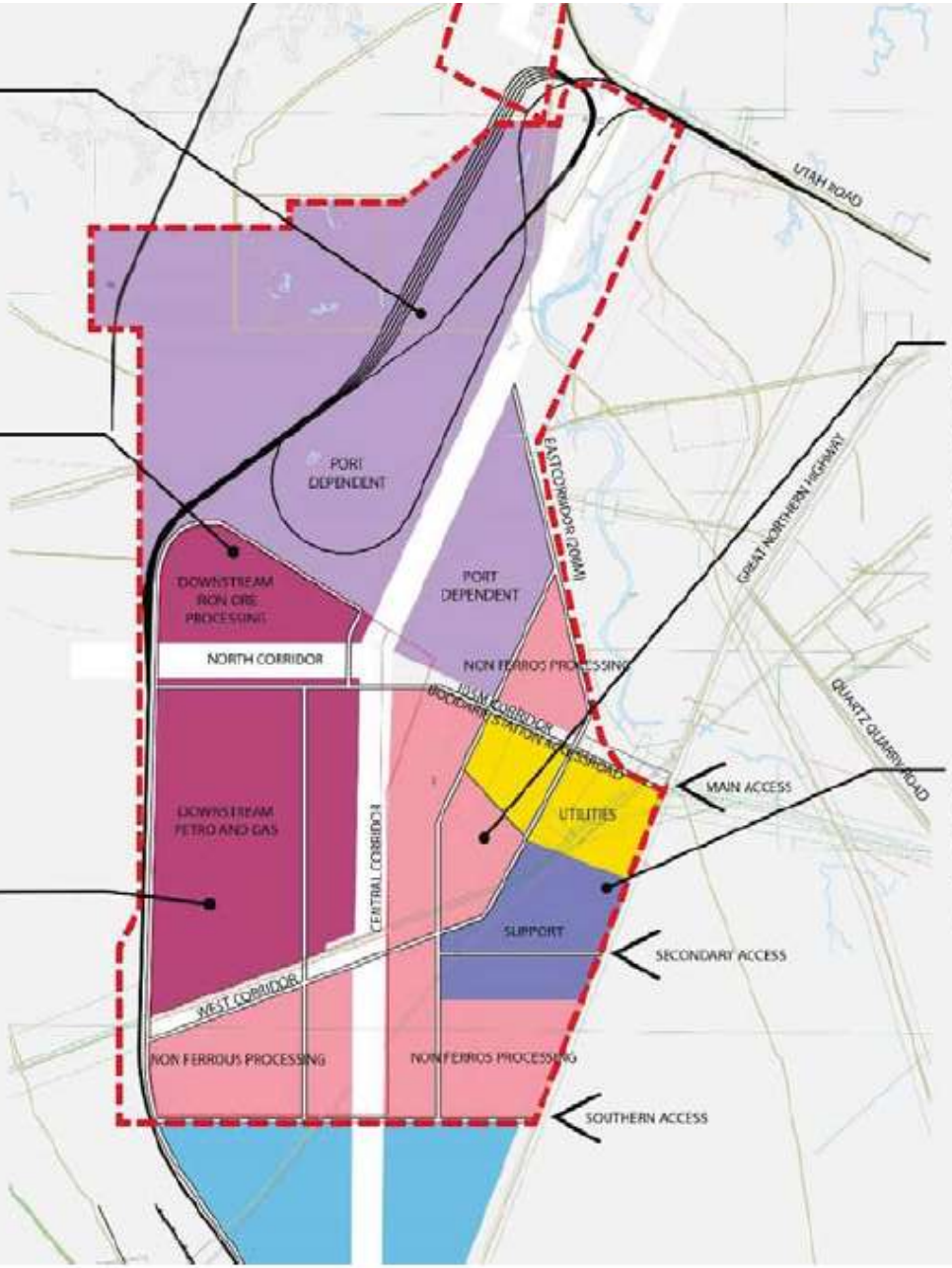
PLANNING OF BOODARIE STRATEGIC INDUSTRIAL AREA, AUSTRALIA

DEFINING PRECINCTS AND INDUSTRY CLUSTERS

Port Dependent
Precinct Location Criteria
- Access to port (service corridor, road, rail)
- Access to bulk commodity rail
- Access to multi-product rail
- Access to road
- Access to conveyor systems

Downstream Iron Ore Processing
Precinct Location Criteria
- Access to port (service corridor, road, rail)
- Access to bulk commodity rail
- Access to multi-product rail
- Access to road
- Access to gas pipelines
- Access to conveyor systems
- Access to HV power supply
- Access to industry feedwater supply
- Buffer zone

Downstream Petroleum & Gas Processing
Precinct Location Criteria
- Access to gas pipeline supply
- Access to port (service corridor, road, rail)
- Access to pipelines in service corridors



Non Ferrous Processing
Precinct Location Criteria
- Access to port (service corridor, road, rail)
- Access to bulk commodity rail
- Access to multi-product rail
- Access to road
- Access to gas pipelines
- Access to HV power supply
- Access to industry feedwater supply
- Buffer zone
- Proximity and access to Support and Utilities Industries Precincts (support and synergies)

Support
Precinct Location Criteria
- Buffer zone
- Access to road
- Adjacent to Non Ferrous Processing (industrial synergies)
- Adjacent to Downstream Iron Ore Processing Precincts (industrial synergies)
- Adjacent to Utilities

Legend
- Boodarie Strategic Industrial Area
- Water, Rivers
- Contours
- Cadastre
- Downstream Processing
- Non-Ferrous Processing
- Support
- Port Dependent
- Future Potential By-Product Storage
- Utilities
- Indicative Road Locations

Source: Town of Hedland. Boodarie Strategic Industrial Area Structure Plan. Weblink.

ESTABLISHMENT OF NEW ECO-INDUSTRIAL PARKS
PRACTICAL EXAMPLE

Planning of Pucallpa eco-industrial Park, Peru

Using EIP approaches to plan and design a better industrial park

- Multi-stakeholder workshops
- Review industry demands
- Encourage synergies and infrastructure sharing
- Optimised transportation and buffer zones
- And more….

Source: Van Beers D., Alegre M., Schwager P., (2014). Concept design of Pucallpa as eco-industrial park. UNIDO assignment Ministry of Industry (PRODUCE), Peru.

LIFE CYCLE PHASES OF (ECO-)INDUSTRIAL PARKS

Startup Phase

- Planning and initial investment
- First customers

Growth Phase

- Many customer investments
- Expansion needed

Maturity Phase

- Customers leaving, new coming in
- Focus on customer turnover
- Need to reinvent to stay in business

Decline Phase

- Customers leaving or
- Pressure from outside to recycle the area

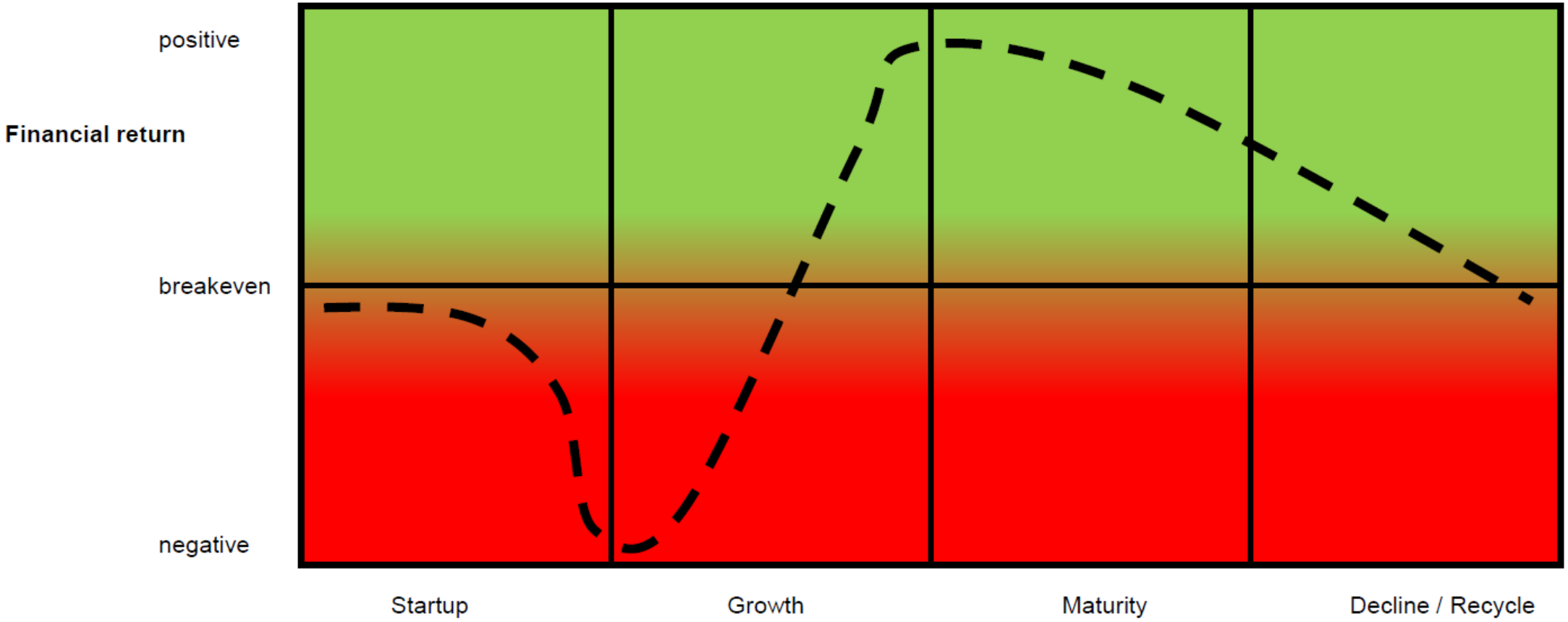
phase:

- **Startup:** Integrated and better planning and design of IP
- **Growth:** Faster growth as IP because of stronger Unique Selling Proposition
- **Maturity:** Optimisation of existing infrastructures, utilities and industrial processes
- **Decline:** Delay the decline and reinvent park to meet increasing sustainability

Source: Dr. Ernst Grigat. Partner, Sapherior GmbH. GEIPP Study Tour. June 2022, Basel, Switzerland

LIFE CYCLE PHASES OF INDUSTRIAL PARKS AND HOW TO MANAGE ACCORDINGLY

The return is different in the lifecycle phases / idealistic:



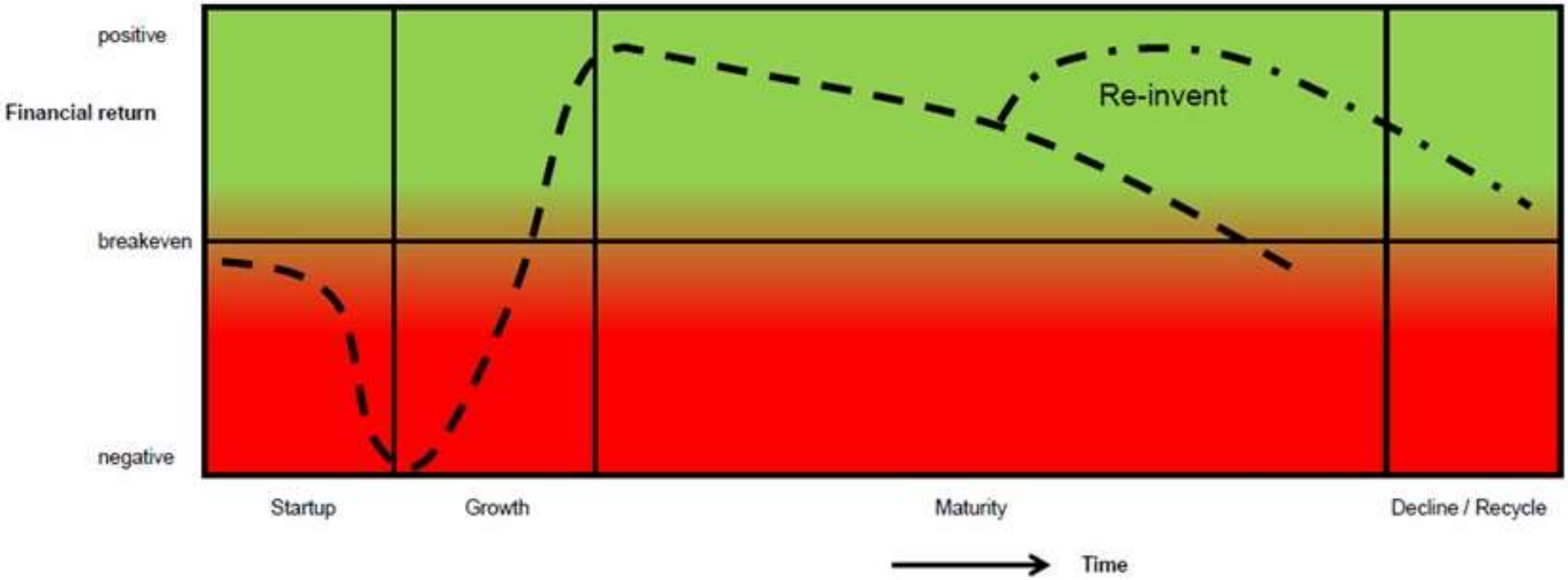
Optional slide

Source: Dr. Ernst Grigat. Partner, Sapherior GmbH. GEIPP Study Tour. June 2022, Basel, Switzerland

Sapherior

LIFE CYCLE PHASES OF INDUSTRIAL PARKS AND HOW TO MANAGE ACCORDINGLY

Try to extend a profitable maturity phase, re-invent the business as needed:

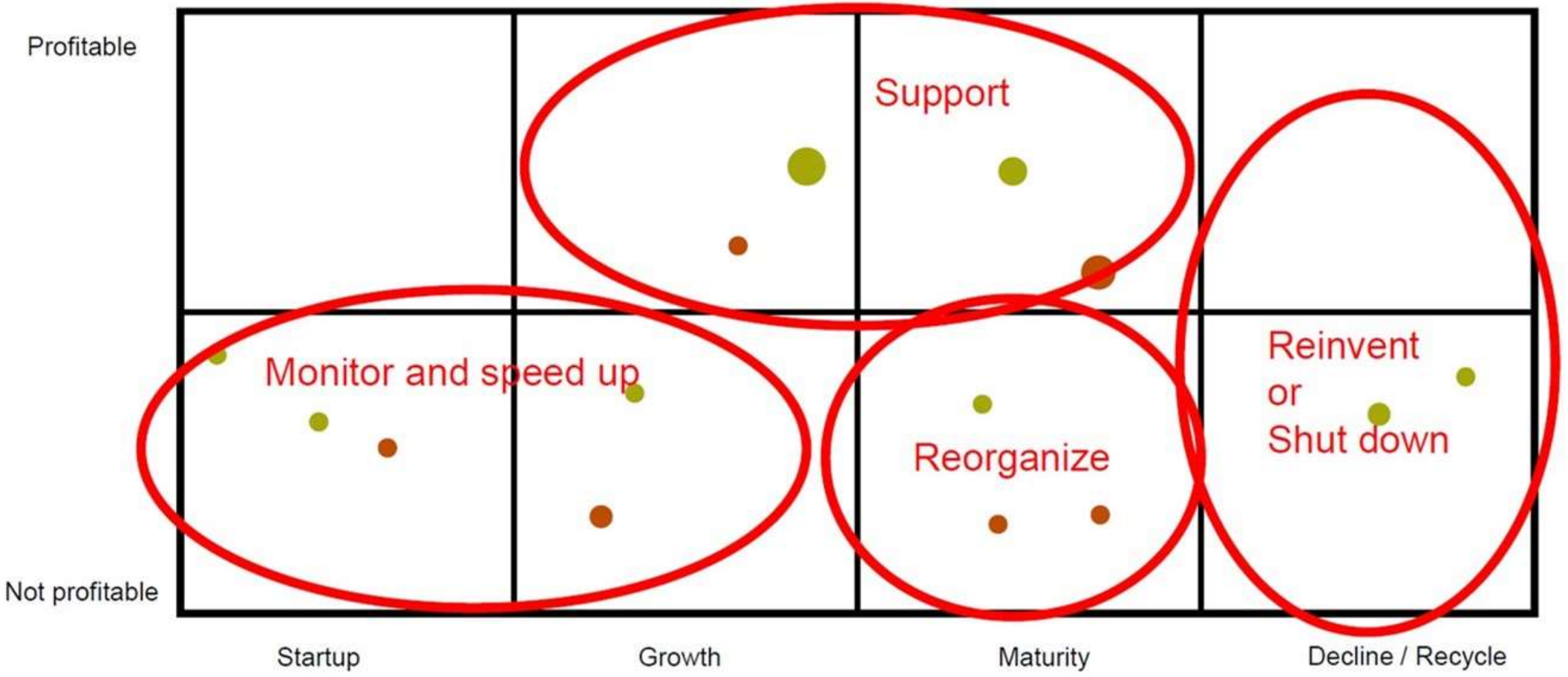


Optional slide

Source: Dr. Ernst Grigat. Partner, Sapherior GmbH. GEIPP Study Tour. June 2022, Basel, Switzerland

LIFE CYCLE PHASES OF INDUSTRIAL PARKS AND HOW TO MANAGE ACCORDINGLY

On a country level, industrial parks can be viewed as a portfolio



Source: Dr. Ernst Grigat. Partner, Sapherior GmbH. GEIPP Study Tour. June 2022, Basel, Switzerland

Sapherior

KEY FIRST STEPS BEFORE DOING DETAILED PLANNING AND DESIGN OF INDUSTRIAL PARK

Review possible site locations for an industrial park

- Selecting the optimal location and size of industrial park is critical to success
- Review of potential site locations is normally done through multi-criteria analysis, covering geographical, economic, environmental and social aspects

Develop feasibility study for developing a new industrial park or optimising an existing park

- Covering economic, environmental and social aspects
- Business case need to be based on realistic scenarios

Define Unique Selling Proposition of industrial park

- What are the desired investors / industries?
- Why should they invest in industrial park?
- How do you attract these industries?

Guidance on industrial park siting

Source: GIZ Sustainable Industrial Area (SIA) Toolbox. https://www.sia-toolbox.net/resources

Reasons for IP selection by investors

Local factors:

- Raw material supply – „Verbund"
- Permits (availability, speed, political support, …)
- Brownfield liabilities
- Logistics
- Skilled labor
- Cultural fit (most underestimated factor!)
- Access to knowledge (Universities, Research Institutes, …)
- Time to market
- Expat living conditions

Optional slide

DETAILED PLANNING AND DESIGN INDUSTRIAL PARK THROUGH MASTER PLAN

A master plan is a comprehensive document that guides development of the industrial park.

- Need integration with urban/regional plans
- Reviewed every 3-5 years or after significant developments

Different terminologies are used internationally

- E.g. Master plan, structure plan, development plan

A master plan is more than a lay-out map of industrial park!

Key contents of a Master Plan

- Overview of the industrial park
- Business case and unique selling proposition
- Management and governance model
- Infrastructure and service needs assessment
- Legal compliance review
- Land use break-up and zoning of the site
- Basic and technical infrastructure
- Environmental infrastructure
- Social infrastructure
- Arrangements to regulate the development and use of land within industrial park
- Plans and thematic layers in the required scale

PRACTICAL EXAMPLE
HARDIN INDUSTRIAL PARK, MONTANA, USA

Structure of Hardin Industrial Park Master Plan

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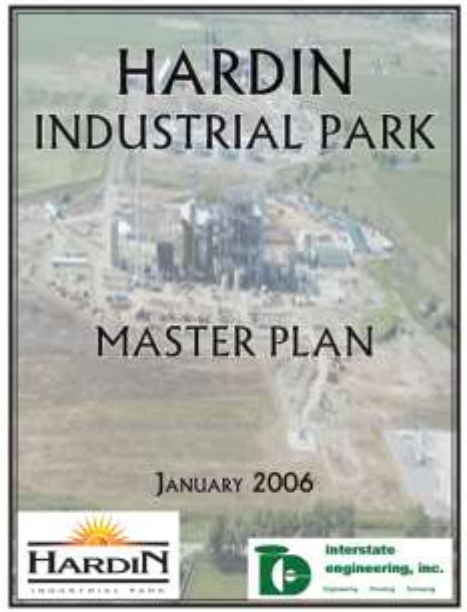

Structure plan documents can be downloaded from:
www.tworiversauthority.org/Master_Plan_Final.pdf

OVERVIEW OF UNIDO'S EIP TOOLS

Planning tools Park level

EIP Concept Planning Tool
Assist in sustainable design of an industrial park

Master Plan EIP Review Tool
Guide sustainability review of existing Master Plan

Implementation support tools Park level

EIP Assessment Tool
Assess park against International EIP Framework and identify EIP opportunities

EIP Management Services Tool
Strengthen and advance services provided by park management to tenant companies

Access to Finance Tool
Identify, review and access available financing options for feasible EIP initiatives

Industrial Symbiosis Identification Tool
Support the identification of waste exchanges between companies

Implementation support tools Country level

EIP Selection Tool
Select parks with high potential for EIP development and successful EIP projects

EIP Policy Support Tool
Support EIP policy development and implementation processes

Monitoring tools Park level

RECP Monitoring Tool
Monitor and report results of RECP assessments in industrial parks

EIP Opportunities Monitoring Tool
monitor and report impacts from EIP opportunities in industrial parks

Tools have been applied in GEIPP countries and beyond:
Colombia, Egypt, Indonesia, Peru, South Africa, Ukraine, Viet Nam

Each tool provides example of use in specific country.

UNIDO's EIP Toolbox is available online:
https://hub.unido.org/eco-industrial-parks-tools

MASTER PLAN EIP REVIEW TOOL AND EIP CONCEPT PLANNING TOOL

	EIP Concept Planning Tool	Master Plan EIP Review Tool
	Similarities	
Targeted users	Park management and developers (inter)national service providers, development agencies	
	Differences	
Tool objectives	Assist in sustainable design of industrial park	Guide sustainability review of existing Master Plan
Recommended starting point for using tool	• Initial design and planning of new industrial park • Start new development phase of existing park	Planned or existing industrial park with existing master plan

EIP CONCEPT PLANNING TOOL

Opportunities:

- Understand industrial land demands
- Attract synergistic anchor tenants to industrial park
- Encourage industrial synergy development
- Optimise industry zoning and clustering
- Optimise existing and future infrastructures and utilities
- Reduce economic, environmental and social risks
- Increase competitiveness of industrial park
- Communicate added value features of EIP concept plan to stakeholders

Steps in tool:

1. Review of existing and future situation
2. Review against International EIP Framework and land use implications
3. Review industry interest to locate to industrial park
4. Review existing and potential anchor tenants
5. Review synergy opportunities and land use implications
6. Define industry clusters and precincts
7. Develop / optimise industrial park concept plan
8. Market and promote added value features of EIP concept plan

Collaborative exercise through interactive workshops

EIP CONCEPT PLANNING TOOL

Updating EIP planning for Parque Industrial Malambo, Colombia

North – Northeast - Average wind speed 19

Commercial businesses & services act as buffer zone for future residential development

Lower risk companies

Centralised facility for efficient and safe collection and storage of segregated wastes from PIMSA companies

Lower risk companies

Higher risk companies *

Truck patio to avoid traffic congestion on PIMSA roads and safe truck parking

Technology Park, truck patio and logistical companies serve as buffer zone on western boundaries of PIMSA

Traffic circles customised to industrial traffic to effective guide trucks through park

Lower risk companies

Higher risk companies *

Optimise industry clustering based on market demands. For example:

- Existing companies
- Food & beverage processing
- Organic based processing
- Inorganic based processing
- Logistics

MASTER PLAN EIP REVIEW TOOL

Step 1
Gap analysis

a. Review on basic contents of master plan
b. Review against International EIP Framework and Master Plan implications

Step 2
Identify and prioritise master plan improvements

Two main pathways to identify master plan improvements, namely:
a. Convert identified gaps from step 1 into opportunities
b. Apply UNIDO's EIP Concept Planning Tool (optional)

Step 3
Action planning of prioritised master plan improvements

Scope the master plan improvements as prioritised in previous step, and consolidate on “who does what when”.

Example of methodology application
Sustainability review of Ancon Industrial Park Master Plan (Peru)

Recommendations to update master plan of Ancon:

- **Criteria:** Set sustainability criteria for industries and business to locate in and operate in Ancon IP
- **Park management:** Set up park management system to operationalise sustainability in Ancon IP
- **Clustering:** Refine industry precincts and define centralised utilities precinct to encourage industrial synergies
- **Water:** Optimise water supply and recycling system in Ancon IP in order to reduce seawater desalination requirements and maximise reuse of water to highest value applications
- **Climate change:** Facilitate development climate change strategy for Ancon IP
- **SMEs:** Develop a strategy to attract (green) SMEs and micro enterprises to Ancon IP
- **Anchor tenants:** Review and attract synergistic anchor tenants to Ancon IP
- **Energy:** Identify areas in Ancon IP most suitable for renewable energy generation
- **Waste:** Consider and plan for a centralised facility to process and recycle wastes and by-products from Ancon IP and regional urban developments

TRENDS ON ECO-INDUSTRIAL PARK DEVELOPMENT

- **Trend on EIPs is driven by need to create more competitive industrial parks which can better to maintain and attract investors**
  - Investors need sustainable supply of competitive priced water, energy, raw materials
  - Increasing understanding that environmental and social risks are economic risks
  - Pressures within global supply chains to meet international sustainability standards
- **There are many international case studies on eco-industrial park development**
  - Internationally, eco-industrial park approaches are applied under different names, but underpinning approaches are largely the same.
  - Demand driven park management and governance models, resource efficiency, (urban) industrial synergies, community collaborations, integrated planning and zoning
- **Traditional industrial parks** which are "just" property development projects where industries are located will **become obsolete in the near future**

Some case studies that confirm these trends

Boodarie Strategic Industrial Area, Australia. Weblink

Pucallpa Eco-Industrial Park, Peru

Parque Industrial Malambo, Colombia. Weblink

Atlantis Greentech Special Economic Zone, South Africa. Weblink

Ecoplus, Austria. Weblink

Hawassa Industrial Park, Ethiopia. Weblink.

National Eco-Industrial Park Programme, South Korea. Weblink.

PLANNING OF NEW ECO-INDUSTRIAL PARKS
INTERNATIONAL LESSONS FOR VIET NAM

- **Master plan is critical to guide economic, environmental, and social development of industrial park**
  - It is worth the investment to develop and keep master plan up-to-date
- **Plan and design industrial parks to minimise economic, environmental and social risks**
  - Environmental and social risks and economic risks!
- **Need to define unique selling proposition (USP) of industrial park**
  - EIP assist (new) industrial parks to have more desirable features for investors compared to “traditional” industrial parks
- **Need for multi-stakeholder engagement as part of EIP planning and design process**
  - Private sector, government, local community
- **Need for appropriate buffer zones to separate higher risk industries and community**
  - Buffer zone can be utilised (e.g. light industries, utilities and services, biodiversity areas, recreation)
- **Ensure maximum flexibility – allow for different development scenarios to happen over time**
  - Think short AND long term (20 years +)

POSSIBLE SOLUTIONS TO SPEED UP EIP TRANSITION IN VIET NAM

- **Create and promote EIP success cases in Viet Nam**, and then have these industrial parks be the "EIP champions" to get other industrial parks on board
- **Regulations** for enable <u>appropriate</u> reuses of water, by-products and wastes
- **Apply market and competition driven approaches** in EIP related policies and EIP recognition schemes
  - Minimise administration burden to industrial parks and ensure sufficient incentives
- **Facilitate access-to-finance**, by integrating EIP investments into existing or new financial mechanisms
- **Innovative and interactive awareness raising** which promote EIPs as a business-driven approach to increase competitiveness of industrial parks and their tenant companies
- **Capacity building customized to specific needs of industrial parks**, covering all components of EIPs.
  - Potential for **train-the-trainer** and creating **"EIP champions"** in industrial parks
- **One-stop shop for industrial parks in Viet Nam** to access information, technical support, financing advice

THANK YOU!

Planning of new eco-industrial parks

Questions or comments

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