



Sustainability Standards for Industrial Parks





Sustainability Standards do not exist today to guide planning, retrofitting and operating/managing industrial areas.

“Let’s think about **making our product** which has **‘zero defect’** so that it does not come back (get rejected) from the world market and **‘zero effect’** so that the manufacturing does not have an adverse effect on our environment.”

- Hon'ble Prime Minister of India, Shri Narendra Modi



Applicability of Standards

- Performance assessment
- Retrofit planning
- Site master planning



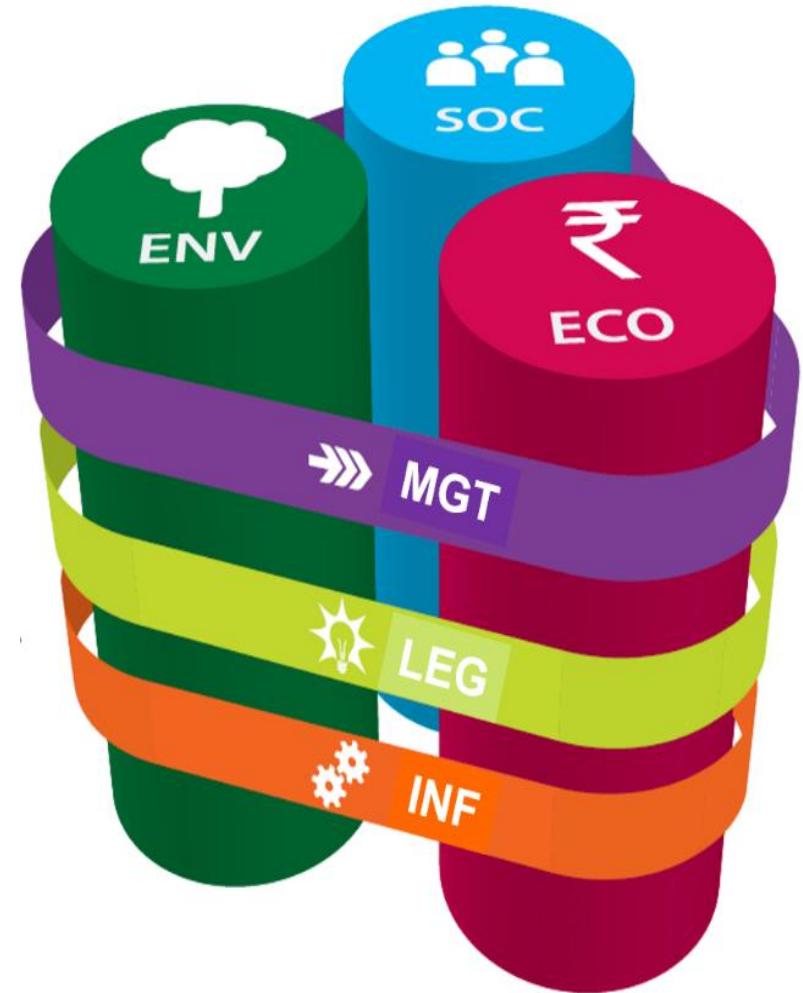
Industrial Estates

Theme Based Parks

Industrial Corridors

Special Investment Regions

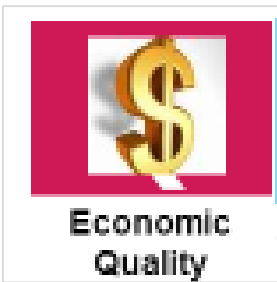
SEZ, PCPIR, NIMZ



- ❑ 6 quality categories
- ❑ 81 comprehensive parameters



An Overview of Parameters



- Investments & revenues
- Employment
- Competiveness
- Investment safety & branding



- Social management system
- Social infrastructure
- Gender equity
- Local community well-being and community outreach



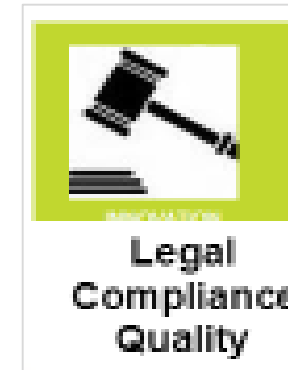
- Administrative & management infrastructure
- Application of standards
- Quality assurance and monitoring
- Environmental stewardship



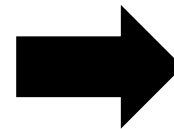
- ❑ Location suitability
- ❑ Site master plan
- ❑ Logistic support provisions
- ❑ Art and architecture
- ❑ Building design
- ❑ Mobility infrastructure
- ❑ Power and energy systems
- ❑ Plantation & landscaping
- ❑ Common infrastructure



- ❑ Cleaner production and resource efficiency
- ❑ Water preservation measures
- ❑ Storm water management
- ❑ Waste water management
- ❑ Waste management
- ❑ Emissions control
- ❑ Resource efficiency
- ❑ Climate change adaptation
- ❑ Biodiversity preservation
- ❑ Disaster risk management



- ❑ Compliance with environmental laws
- ❑ Compliance with social laws
- ❑ Compliances with international commitments
- ❑ Sustainability aspects



Gold	>85% points
Silver	65 - 85%
Bronze	50 - 65%



Evaluation/Assessment for Rating

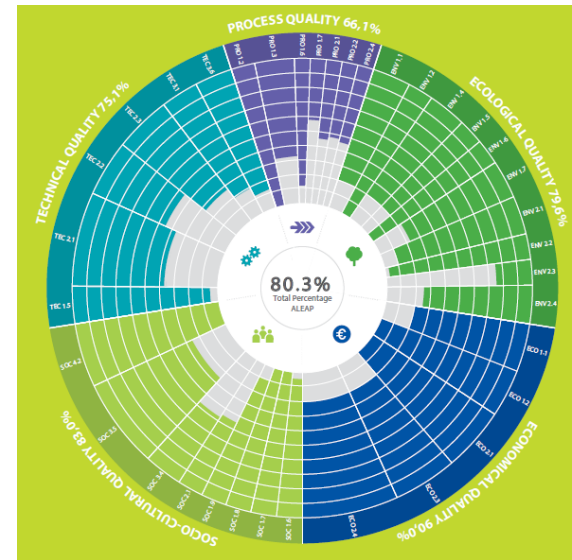
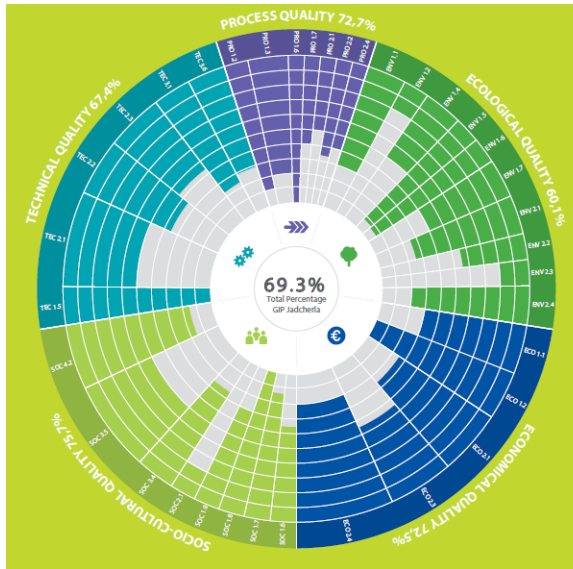
Quality criteria	Value	Parameter	Weightage %	Sub-parameter	Weightage %
Economic quality	100	Investments & revenues	25	Total investments	25
				Tax revenues for the government	25
				Revenues for the industrial park management	25
				FDI in the industrial park	25
		Employment	25	Total employment	25
				Employment to local residents	25
				Nature of employment	25
				Employment for women	25



Tool box developed for conducting trainings for decision makers, architects, planners and engineers



Testing of tool at national platforms (Gujarat, West Bengal, Andhra Pradesh, Telangana)



- **Pre-assessments for ALEAP Green industrial park, Hyderabad: Gold rating**

- **Pre-assessments for Green Industrial Park- Jadcherla: Silver rating**

- **Piloting ongoing for Hyderabad Pharmacy (≈ 20,000 acres)**
- **Piloting to be soon initiated by GIDC for Vapi industrial estate**

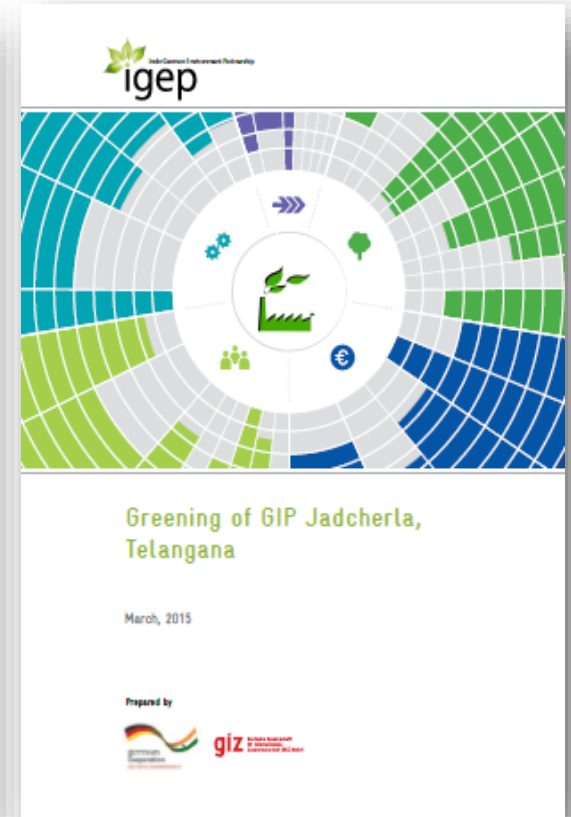
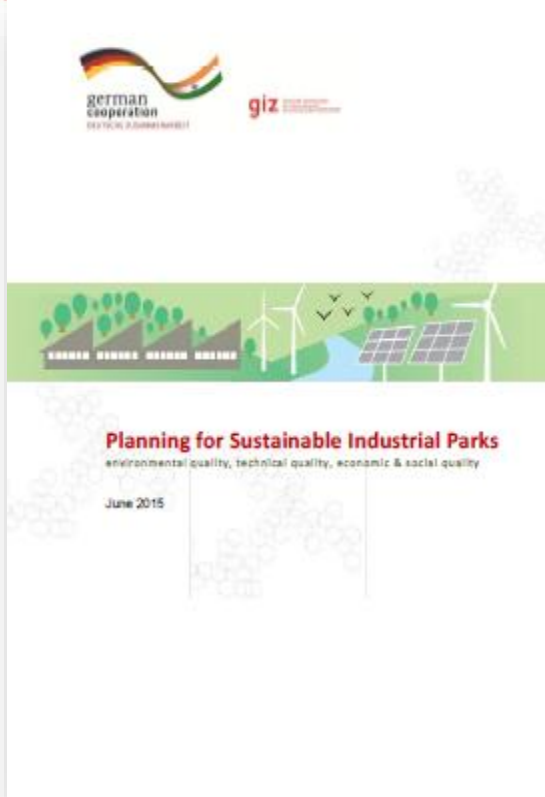


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Pilots & documentation on site master planning
<http://seip.urban-industrial.in/>

Case of ALEAP Green Industrial Park, Nandigama (Telangana, India)

Implemented by

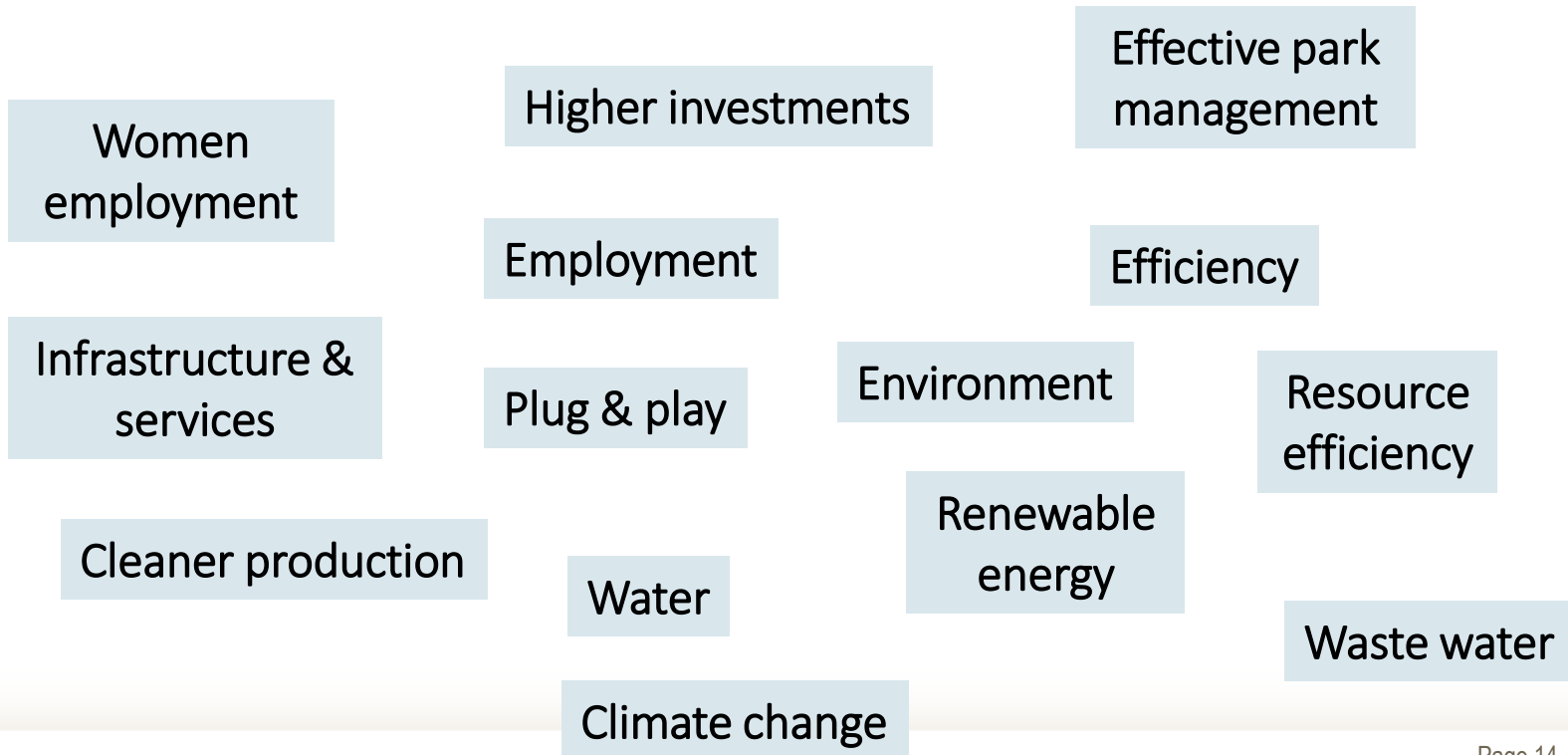
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- ❑ **Environment Friendly** site master plan; Efficient circulation system
- ❑ **Green Buildings** for factory sheds; efficient industrial plot layout and building layout; environment friendly bldg. Materials; Standard fencing design; Signage
- ❑ **Green Energy** master planning; PV roof tops; Solar street lamps; Solar power plant
- ❑ **Pollution under control:** Waste water treatment, recycle/reuse; Waste treatment, reuse; Rainwater harvesting
- ❑ **Green Spines:** Ecological landscaping; Organic farms



Sustainable Industrial Park can be defined as an earmarked area for industrial use at a suitable site that ensures sustainability with integration of social, economic and environmental quality aspects into its siting, planning and management.





Applicability: Linking of Sustainability Standards

- Adoption by GIDC for planning of new and retrofitting of existing industrial estates. To be first State to announce
- Link to State Government Scheme - “Assistance to Industrial Infrastructure” (upto Rs 25 cr) of GoGujarat
<http://ic.gujarat.gov.in/assistance-for-industrial-infrastructure.aspx>
- Introduce 3rd party rating/certification – example IGBC (Indian Green Building Council)
- Link to EIA and Environmental Clearance for Industrial Estates
- Link to Industrial Infrastructure Upgradation Scheme (IIUS) of DIPP/MoC&Ind, GoI



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