Sustainability Standards and its Application

Presented at the National Conference on “Sustainable and Environment-friendly Industrial Production”

Session 4: Successful Models: Planning and Retrofitting of Industrial Areas

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Introduction

- Comprehensive Sustainability Standards for planning, retrofitting, and operating/managing industrial areas in India do not exist as of today
- National and international rating systems available – for SEZs (IGBC), measuring pollution (CPCB), green factory buildings (IGBC), eco-industrial parks (UNIDO/GIZ/World Bank), industrial park rating system (DIPP), etc.
- Application of parameters and measuring sustainability at the overall site level of industrial areas are still a challenge

No standard of assessing industrial area quality available in India
Introduction

Sustainability Standards are required for:

- Achieving development objectives – industrial growth, investments, employment, etc
- Achieving competitiveness, profitability for industries, and making industrial parks attractive to investors
- Ensuring effectiveness, efficiency, and no negative impacts
- Addressing the aspects of climate change, gender, resource efficiency, and pollution reduction
- Ensuring that adequate common infrastructure and services are in place to support particularly the SMEs
Genesis of Sustainability Standards

2010, Workshop on Eco-Industrial Park with ALEAP

Support in retrofitting existing industrial parks in Andhra Pradesh and Gujarat

Engaging DGNB and Buro Happold to create Green Rating System for Industrial Areas in India

2018, Creating ‘Sustainability Standards for Industrial Parks in India’ with inputs from various stakeholders

Training Government Officials on Green Rating parameters for industrial areas

Support in developing sustainable site master plan for ALEAP
Quality Criteria

- 6 quality categories
- 81 comprehensive parameters
The Sustainability Standards are aimed at paving a way for achieving sustainable industrialization in India.
Rating System

Gold: >85% points
Silver: 65 - 85%
Bronze: 50 - 65%
### Evaluation/Assessment for Rating: example

<table>
<thead>
<tr>
<th>Quality criteria</th>
<th>Value</th>
<th>Parameter</th>
<th>Weightage %</th>
<th>Sub-parameter</th>
<th>Weightage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic quality</td>
<td>100</td>
<td>Investments &amp; revenues</td>
<td>25</td>
<td>Total investments</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tax revenues for the government</td>
<td>25</td>
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<td></td>
<td></td>
<td>Revenues for the industrial park management</td>
<td>25</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>FDI in the industrial park</td>
<td>25</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td>Employment</td>
<td>25</td>
<td>Total employment</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Employment to local residents</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nature of employment</td>
<td>25</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Employment for women</td>
<td>25</td>
</tr>
</tbody>
</table>

For calculations, click [here](#)
Use of Sustainability Standards in SEIP Project

- Toolbox developed to support planning process
- Testing of tools for creating sustainable site master plans through workshops
- Several documents developed for partners using Sustainability Standards
- Trainings conducted for knowledge dissemination on sustainability parameters
Use of Sustainability Standards in SEIP Project

- Pre-assessments for ALEAP Green industrial park, Hyderabad and Green Industrial Park - Jadcherla

- Developed 3 site master plans and 2 retrofit plans of industrial areas by using the standards

- To be adapted by GIDC for wider application at the state level
Where to integrate Sustainability Criteria?

Possibilities for integration of quality criteria and parameters at each stage

Effective land use and provisions for infrastructure can save future costs
## Key benefits

<table>
<thead>
<tr>
<th><strong>MoCI, DIPP</strong></th>
<th><strong>MoEFCC, CPCB, SPCB</strong></th>
<th><strong>Industries</strong></th>
</tr>
</thead>
</table>
| • Basis to provide incentives to the industries for committing to the Sustainability Standards.  
  • Achieve the national vision of “Make in India – Zero effect, Zero defect”.  
  • Exemplary positioning of India’s industrialisation in the international community.  | • Ease permits for industries and industrial parks that adopt Sustainability Standards.  
  • Transparency in evaluations of existing industrial parks.  
  • Can introduce green awards and rewards for best performing industrial parks | • Cost savings from common infrastructure and services  
  • Improved marketing opportunities for the products  
  • Competitive edge in international market  
  • Improved productivity  
  • Reduced risks and operating costs  
  • More investment safety |
Applicability: Linking of Sustainability Standards

- Link to EIA and Environmental Clearance for Industrial Estates
- Link to Industrial Infrastructure Upgradation Scheme (IIUS) of DIPP/MoC&Ind, GoI
- Link to State Government Schemes such as “Assistance to Industrial Infrastructure” (upto Rs 25 cr) of Govt. of Gujarat (http://ic.gujarat.gov.in/assistance-for-industrial-infrastructure.aspx)
- For adoption by State Agencies such as GIDC, SIIDCUL, DSIIDC, APIIC, TSIIC etc. for planning and retrofitting of Industrial Estates
- For 3rd party rating/certification such as IGBC (Indian Green Building Council)
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