Confederation of Indian Industry

GreenPro Certification Standard for

Air Handling Units

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Published by:

Confederation of Indian Industry
CII- Sohrabji Godrej Green Business Centre
Survey No 64, Kothaguda Post
Near HITEC City, Hyderabad - 500 084
Tel: +91 40 44185111
Fax: +91 40 44185189
www.greenbusinesscentre.com

1. GreenPro Certification–Life Cycle Approach

GreenPro adopts a holistic approach based on the 'Life Cycle' of the product. GreenPro encourages the product manufacturers to implement measures that would result in environmental, health and wellbeing benefits at the following stages of the life cycle of the products.

a) Product Design
b) Procurement of Raw materials
c) Manufacturing
d) Use
e) Disposal / Recycling

2. Benefits

GreenPro certification benefits both the product manufacturers and the users. The benefits are both tangible and intangible.

<u>For Product Manufacturers</u>

Some of the benefits of GreenPro Certification for the product manufacturers are highlighted below:

a) GreenPro Certification differentiates the Green product from the competition
b) Increases the market reach out with credible and precise information on the Green features of the products
c) Enables Green product Innovation
d) Increases resources conservation through enhanced energy efficiency, water efficiency, use of renewable energy, minimization of waste etc., during the manufacturing process and hence enables increase in profitability
e) Acts as a driver for achieving environment excellence
f) Complements National & International Green Building Certification Systems

<u>For Users</u>

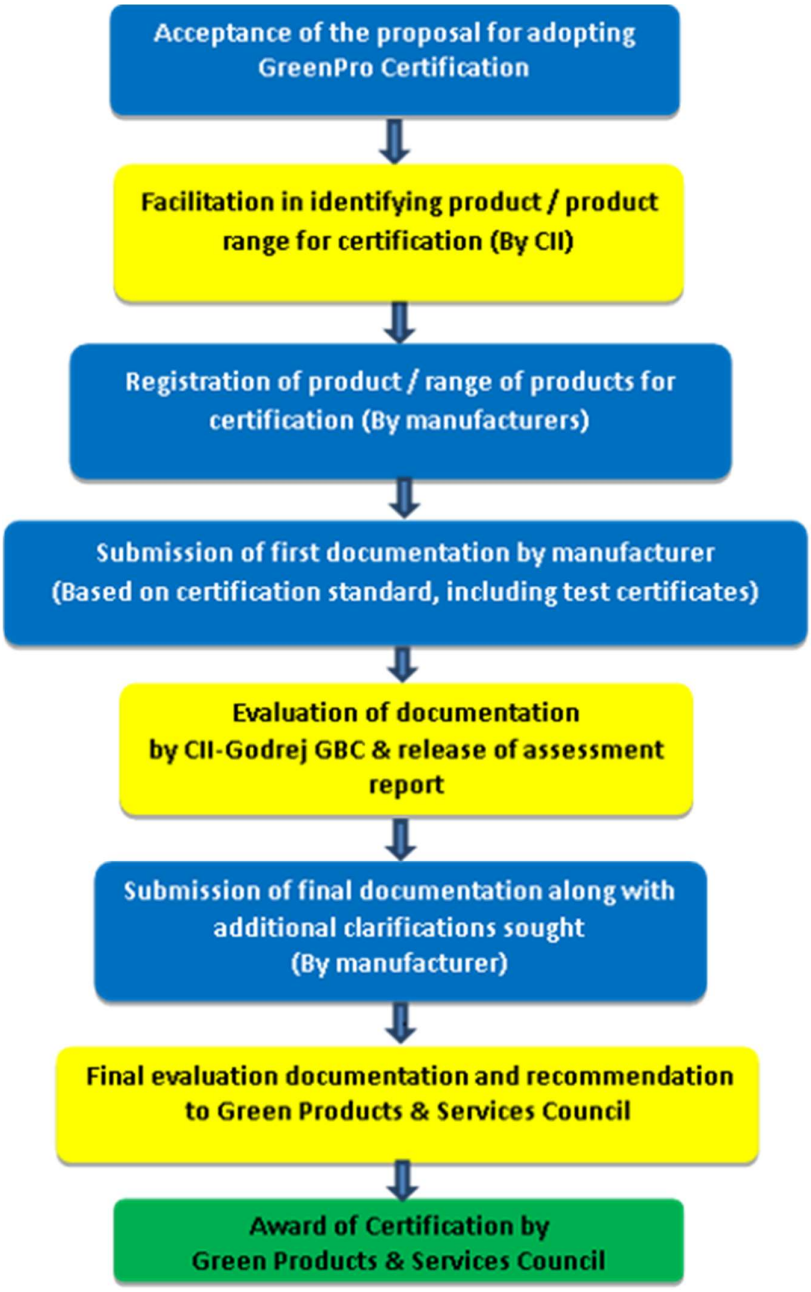
Use of GreenPro certified Green products leads to significant tangible and intangible benefits for the end users.

Some of the benefits for the users are highlighted as below:

a) Time and effort in carrying out due diligence in selecting a green product is saved
b) The user is assured of the performance of the product and equipment
c) Ensures Toxic and hazardous substances free products which in turn decreases "health and wellbeing" risks of the users
d) Improved product performance during use to reduce resource consumption and environmental impacts
e) Recognition and credits for achieving national and international Certification for the buildings

3. Methodology of Certification

The step-by-step methodology for the Certification is mentioned below.



4. Green product Certification

A product will be certified depending upon the number of credit points achieved based on the evaluation of 3rd party conformity agency.

The maximum achievable credit points are 100. A product will be certified as 'Green Product' if it achieves 50 or more credit points in the evaluation.

5. Validity of the Certification

GreenPro Certification is valid for 2 years from the date of award of the Certification for the product/ product range.

At the end of the validity period, the product manufacturer needs to apply for the renewal of the Green product Certification.

GreenPro Certification Framework- Air Handling Units

S No	Criteria	Credits Points
1	**Product Design**	**5**
1.1	*Eco-vision statement*	*1*
1.2	*Strategies adopted, resource allocation, stakeholder engagement, implemented measures & Impacts:* • *At the design stage* • *At the manufacturing stage*	*4*
2	**Product Performance**	**45**
2.1	*Fan Efficiency Grade*	*45*
	Fan Efficiency Grade (FEG) > 60	*20*
	Fan Efficiency Grade (FEG) > 65	*25*
	Fan Efficiency Grade (FEG) > 70	*30*
	Fan Efficiency Grade (FEG) > 75	*35*
	Fan Efficiency Grade (FEG) > 80	*40*
	Fan Efficiency Grade (FEG) > 85	*45*
3	**Raw Materials**	**12**
	Restriction of Heavy Metals	***7***
3.1	*Paints and coatings: Use of coating with elimination of heavy metals* OR *Anodizing or powder coating: Use of coating and safe disposal of chemicals used during anodizing process.*	7
	Recycled Content	***5***
3.2	*Percentage of recycled content > 5% ≤ 10%*	*1*
	Percentage of recycled content > 10% ≤ 15%	*2*
	Percentage of recycled content > 15% ≤ 20%	*3*
	Percentage of recycled content > 20% ≤ 25%	*4*
	Percentage of recycled content > 25%	*5*
4	**Manufacturing Process**	14
	Energy Efficiency	***5***
4.1	*Reduction in specific energy consumption ≥ 3%*	*1*
	Reduction in specific energy consumption ≥ 6%	*2*
	Reduction in specific energy consumption ≥ 9%	*3*
	Reduction in specific energy consumption ≥ 12%	*4*
	Reduction in specific energy consumption ≥ 15%	*5*
	Water Efficiency	***5***
4.2	*Reduction in specific water consumption ≤ 5%*	*1*
	Reduction in specific water consumption ≤ 10%	*2*
	Reduction in specific water consumption ≤ 15%	*3*

	Rainwater Harvesting - Harvest 95% rainwater run-off from Roof & Non-Roof areas	*1*
	Beyond the fence initiatives	*1*
	Renewable Energy	
4.3	*On-site renewable energy generation (Both electrical & thermal)*	
	≥2.5% ≤ 5% substitution	*1*
	≥5% ≤ 7. 5% substitution	*2*
	≥7.5% ≤ 10% substitution	*3*
	≥10% ≤ 12.5% substitution	*4*
5	**Waste Management**	**6**
Mandatory Requirement*	*Solid, Liquid and Gaseous Waste: Compliance to local regulations*	
5.1	***Non-Hazardous waste***	***3***
	10% reduction in disposal of waste per unit of production	*1*
	20% reduction in disposal of waste per unit of production	*2*
	30% reduction in disposal of waste per unit of production	*3*
5.2	***Hazardous waste***	***3***
	> 10%reduction in waste going to landfill	*1*
	> 15%reduction in waste going to landfill	*2*
	> 20%reduction in waste going to landfill	*3*
6	**Life Cycle Analysis**	**8**
6.1	*Carry out life cycle assessment considering Cradle to Cradle as boundary condition*	*5*
6.2	*Implement feasible environmental impact reduction measures across product life cycle*	*3*
7	**Product Stewardship**	**5**
7.1	*Stakeholder Education and Awareness Programme*	*1*
7.2	*Quality Management System*	*1*
7.3	*Extended Producer Responsibility*	*3*
	Institute a system for product take-back for recycling or reusing	
8	**Innovation**	**5**
8.1	• *Achieve significant and measurable environmental performance using a strategy not addressed in the GreenPro standard* • *Any measure exceeding the threshold of the credits that are applicable for exemplary performance*	*4*
8.2	*Other Credentials, Awards and Accolades*	*1*