

GREEN PRODUCTS RATING FURNITURE

Pilot Version

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1. Introduction

The construction industry is one of the fastest growing sectors in India contributing significantly for economic growth. At the same time, the rapid growth of the sector poses host of challenges for preserving environment and health of occupants. The Green Building Movement spearheaded by Indian Green Building Council (IGBC) has enabled construction industry to incorporate Green Building concepts for the enhanced economic, health and environment performance of the buildings.

Thus far, the Council has been instrumental in enabling 1.86 Billion sq.ft of green buildings in the country. The Green Building market growth has created demand for Green products & services. The demand is expected to grow exponentially in future.

Against this background, CII-Sohrabji Godrej Green Business Centre (CII-Godrej GBC) has launched **Green Products and Services Council** with the support of all the stake holders including Product manufacturers, standard developers, Architects, Green Building developers, Conformity agencies etc.

The key objective of the council is to facilitate Green product market transformation in India through 'Green Product Rating'.

The initial focus of the council will be on Green building products and related technologies. Over a period of period of time, the council will expand its focus on other areas such as Industrial products, consumer items, services etc.

Why Green Product Rating?

The Green Product Rating is a tool for facilitating Green Product market transformation in the country. The Green Products Rating is expected to:

- 1. Enable green building projects in selecting the right product and equipment
- 2. Increase the market demand for the Green products
- 3. Puts a system in place for a product to be called 'green'

2. Green Products Rating - Life Cycle Approach

The Green Products Rating adopts a holistic approach based on the 'Life Cycle' of the product. The rating system 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.

- 1. Product Design
- 2. Raw materials
- 3. Manufacturing Process
- 4. Product Performance during use
- 5. Disposal / Recycling



3. Benefits

The Green product rating benefits both the product manufacturers and the users. The benefits are both tangible and intangible.

For Product Manufacturers

Some of the benefits of the Green product rating for the product manufacturers are highlighted below:

- 1. Green product rating differentiates the Green product from the competition
- 2. Increases the market reach out with credible and precise information on the Green features of the products
- 3. Enables Green product Innovation
- 4. Increases resources conservation through enhanced energy efficiency, water efficiency, use of renewable energy, minimization waste etc during the manufacturing process and hence increase in profitability
- 5. Acts as a driver for achieving environment excellence
- 6. Complements National & International Green Building Rating systems

For Users

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

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

- 1. Time and effort in carrying out due diligence in selecting green product is saved
- 2. The user is assured of the performance of the product and equipment
- 3. Ensures Toxic and Carcinogen free products which in turn increases health benefits & wellbeing of the users
- 4. Improved product performance during use to reduce resource consumption and environmental impacts
- 5. Recognition and credits for achieving national and international rating for the buildings

4. National Priorities addressed in Rating

The Green Product Rating addresses the following which are priorities of the Government at the National level:

Water:

Water is a major concern in most part of the country. Implementation of water efficiency measures and "zero Liquid Discharge" are being encouraged to address the water related issues.

Land:

Availability of land and increase in land pollution are major areas of concern. The rating system demands for increased recycling of material after use which would result in reduction in landfills and hence reduction in land pollution.

Energy Efficiency:

The rating system encourages the product manufacturers to adopt energy efficiency improvement measures and reduce their energy consumption which is in line with the National Mission on Enhanced Energy Efficiency. This also addresses:

Renewable Energy:

The rating advocates compliance with Renewable Purchase Obligation (RPO) and encourages product manufacturers to invest in renewable power generation. This is in line with Government of India's objective of increasing the contribution of renewable power sources.

5. Development of Rating Standards

Green product rating applies 'product specific Rating Standards' for evaluating the products. The rating standards are developed with the support of respective product committees formed under the aegis of Green Products and Services Council (GP&SC).

The product committee involves all major stake holders related to the respective product category including product manufacturers, standard setters, conformity agencies, Architects, users etc. The product committee is led by an expert who is also an unbiased specifier.

5.1 Features of Green Product Rating

The rating system follows prescriptive as well as performance based approach for evaluating a product. The rating calls for demonstration of product performance through testing as per specified standards and implementation of measures at every stage of Life Cycle of the product, leading to clearly measurable environmental benefits.

The rating system evaluates green features for products based on various performance parameters grouped under the following Credit Modules.

- Product Design: The rating necessitates manufacturer to demonstrate its top management commitment towards environment performance improvement of the product.
- **2. Product Performance:** The required performance parameters of the product need to be demonstrated through product testing as per the specified standards.
- **3. Raw Materials:** The rating demands for efforts to bring down the use of virgin materials through recycling and elimination of toxic and hazardous content in the input materials for product manufacturing.
- **4. Manufacturing Process:** The green product rating recognises the efforts taken by the product manufacturer to reduce the resource consumption during the manufacturing process

- **5. Waste Management:** The rating calls for efforts to minimize the wastes or safer disposal of the wastes generated during manufacturing process other than the materials used for product manufacturing.
- **6. Life Cycle Approach:** The rating encourages the product manufacturer to carryout Life cycle analysis for the products and implement measures based on the impact analysis.
- 7. **Product Stewardship:** The rating recognizes the measures implemented by the product manufacturers to reduce environmental impact in product transportation and recycling / product disposal
- **8. Innovation:** The rating recognises the innovative measures implemented by the product manufacturers which had resulted in substantial reduction in environment impact exceeding the threshold level specified in the rating standard.

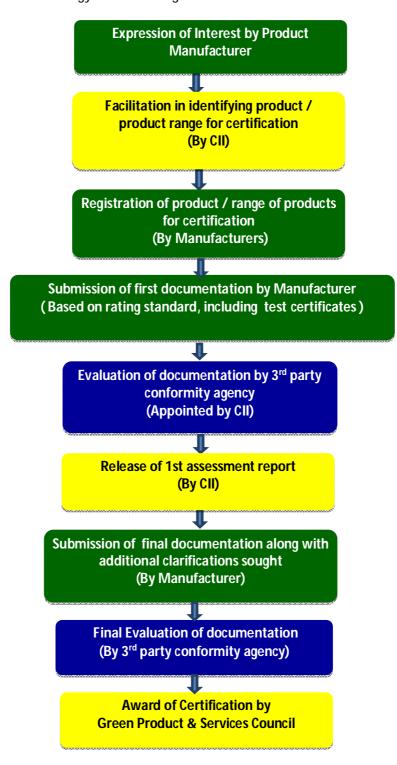
The approach and the Credit Modules for evaluation of products remain by and large the same for all the product categories. However, the credits as part of the individual Credit Modules and the weightage will vary depending upon the product categories and their significance.

A Product needs to comply with certain specified mandatory requirements and compliance to mandatory requirements is a pre-requisite. The mandatory requirements will vary depending upon the product category.

The threshold limit of all the credits is 100. The product manufacturers can apply for the Credits depending upon the applicability and gain credit points for the rating.

6. Methodology of Rating

The step by step methodology for the rating is mentioned below.



6.1 Product testing

The Green Product Rating calls for testing of select product parameters for the award of rating. The product parameters will vary depending upon product categories. Wherever testing of the products is specified, the rating system also specifies the testing standards and the requirements.

The product manufacturers can carry out the product testing in any of the Laboratories accredited by **National Accreditation Board for Testing and Calibration Laboratories (NABL)** according to the specified standards and produce the test certificates with the test results for further evaluation.

If the product testing has been already carried out in an NABL accredited laboratory owned by the product manufacturer, the product manufacturer has to submit the details of the test procedures & methodology for verification.

If the product testing need to be carried out outside the country, the laboratory should have been accredited by the accrediting agency recognized by the Government of the respective country or an accrediting agency which is member of international bodies such International Laboratory Accreditation Co-operation (ILAC) or Asia Pacific Laboratory Accreditation Co-operation (APLAC).

6.2 Evaluation by 3rd party Conformity Agency

The document submitted by the product manufacturer will be evaluated by a 3rd party conformity agency appointed by CII-Godrej GBC.

Conformity agency is a competent 3rd party agency for carrying out product conformity assessment for various products which would involve Product testing, inspection, factory audits and documentary review.

7. Green product rating

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.

8. Validity of the Rating

The Green product rating is valid for 2 years from the date of award of the rating for the product / product range.

At the end of the validity period, the product manufacturer need to apply for the renewal of the Green product rating.

Before the end of the validity period, the product manufacturer can attempt for higher level of rating after implementing sufficient measures for gaining credit points. However, the attempt can be made only after a year from the date of award of the product rating.

9. Fee for Green product rating

The fee details are available on website <u>www.greenbusinesscentre.com</u>. The fee details can also be obtained through the contact details mentioned in the manual.

10. Upgradation of rating

This Green product rating for Furniture is Green Product and Services council's initial efforts towards facilitating market transformation in Green Building Products. The council's endeavor is to periodically upgrade the standards and raise the bar.

The upgradation of the standards will be taken up with the support of product committee on consensus basis. Updates or addenda will be incorporated and formally communicated to the applicants.

11. A. Summary of Credits & Points Distribution

	Green Product Rating		
	FURNITURE (NON-WOOD)		
Credits	Credit Points		
	Product Design		
Credit 1.1	Eco - Vision	1	
	Strategies adopted, resource allocation, stake holder engagement, Implemented measures & Impacts		
	- At design stage of the product	2	
	- At manufacturing stage of the product	2	
	Sub Total	5	
	Product Performance		
Mandatory Requirement*	Testing of Emission parameters as per ISO 16000-3 / ISO equivalent standards	16000-6 or	
Credit 2.1	Minimise air contaminants concentration		
	Formaldehyde (Methanal)	10	
	TVOC	10	
	Total Aldehydes	5	
	4-Phenylcyclehexene (4-PCH)	5	
	Sub Total	30	
	Raw Material and Green Supply Chain Management		
Mandatory Requirement*			
Credit 3.1	Recycled material used as Raw material	10	
	>5% of final product	2	
	>10% of final product	4	
	>15% of final product	6	
	>20% of final product	8	
	>25% of final product	10	
Credit 3.2	Green Supply Chain Management		
	Education and Awareness		
	≥ 50% Suppliers	1	
	≥ 80% Suppliers	3	

Credit 3.3	Green Procurement Guidelines	
	Green procurement guidelines for industry	2
	Sub Total	15
	Sub Total	15
	Manufacturing Process	
Credit 4.1	Energy Efficiency	
	Reduction in specific energy consumption ≥ 5%	1
	Reduction in specific energy consumption ≥ 10%	2
	Reduction in specific energy consumption ≥ 15%	3
	Reduction in specific energy consumption ≥ 20%	5
	Reduction in specific energy consumption ≥ 25%	7
	(OR)	
	Benchmarking	
	National Benchmarking – Among top 5 Companies	5
	International Benchmarking – Among top 10 Companies	7
Credit 4.2	Water Efficiency	
	Reduction in specific water consumption	
	Reduction in specific water consumption ≥ 5%	1
	Reduction in specific water consumption ≥ 10%	2
	Reduction in specific water consumption ≥ 15%	
	Reduction in specific water consumption ≥ 20%	4
	(OR)	
	Benchmarking	
	National level- Among top 5 companies	3
	International level - Among top 10 companies	4
	Dain water Harvesting Harvest 05% rainwater run off	
	Rain water Harvesting - Harvest 95% rainwater run-off from Roof & Non Roof areas	1
	Beyond the fence initiatives	1
Credit 4.3	Renewable Energy	
	On-site renewable energy generation (Both electrical & thermal)	
	≥2.5% ≤ 5% substitution	1
	> 5% substitution	2
	Off-site Renewable Power	
	≥10% substitution	1

	≥20% substitution	3
	≥30% substitution	5
	Sub Total	20
	(OR)	
	GreenCo Platinum / Gold	20
	GreenCo Silver	15
	GreenCo Bronze	10
	5 Waste Management	
Credit 5.1	Waste Utilization & Disposal	
	Recyclable waste	
	75 – 80% recycled	1
	81 – 85% recycled	2
	86 – 90% recycled	3
	91 – 95% recycled	4
	> 95% recycled	5
Credit 5.2	Non-recyclable Waste	
	> 5%reduction in waste going to landfill	1
	> 10%reduction in waste going to landfill	2
	> 15%reduction in waste going to landfill	3
	> 20% reduction in waste going to landfill	4
	> 25% reduction in waste going to landfill	5
	Sub Total	10
	Life Cycle Approach	
Credit 6.1	Design for Life Cycle Analysis	4
	Measures taken & Quantification of benefits achieved	
	- Implementation of at least one initiative	1
	- 2% impact reduction	2
	- 4% impact reduction	3
	- 6% impact reduction	4
	- 8% impact reduction	5
	- 10% impact reduction	6
	Sub Total	10

7	Product Stewardship			
Credit 7.1	Credit 7.1 Education/ Community Outreach and Engagement			
	> 10% of people involved in handling the product after dispatch and users			
	> 20% of people involved in handling the product after dispatch and users	2		
Credit 7.2	Extended Producer Responsibility			
	System for product take-back for recycling or safe disposal			
	System for packaging materials take back for reuse or recycling	1		
	Sub Total	5		
8	Innovation			
Credit 8.1	Innovations	4		
	Other Credentials, Awards and Accolades	1		
	Sub Total	5		
	Total Points	100		

	Green Product Rating		
	Furniture (Wood)		
Credits	Criteria	Credit Points	
1	Product Design		
Credit 1.1	Eco - Vision	1	
	Strategies adopted, resource allocation, stake holder engagement, Implemented measures & Impacts		
	- At design stage of the product	2	
	- At manufacturing stage of the product	2	
	Sub Total	5	
2	Product Performance		
Mandatory Requirement*	Testing of Emission parameters as per ISO 16000-3 / ISO equivalent standards	16000-6 or	
Credit 2.1	Minimise air contaminants concentration		
	Formaldehyde (Methanal)	10	
	TVOC	10	
	Total Aldehydes	5	
	4-Phenylcyclehexene (4-PCH)	5	
	Sub Total	30	
3	Raw Material and/or Efforts for Green Supply Chain Management	25	
Mandatory Requirement*	Legal and traceable source of raw material i.e. wood		
Credit 3.1	Use of Rapidly Renewable Material / Recycled material		
	>5% of product part	2	
	>10% of product part	4	
	>15% of product part	6	
	>20% of product part	8	
	>25% of product part	10	
Credit 3.2	Green Supply Chain Management		
	>50% suppliers	1	
	> 80% suppliers	3	
Credit 3.3	Green Procurement Guidelines	2	
	Sub Total	15	

	Manufacturing Process	
Credit 4.1	Energy Efficiency	
	Reduction in specific energy consumption ≥ 5%	1
	Reduction in specific energy consumption ≥ 10%	2
	Reduction in specific energy consumption ≥ 15%	3
	Reduction in specific energy consumption ≥ 20%	5
	Reduction in specific energy consumption ≥ 25%	7
	(OR)	
	Benchmarking	
	National Benchmarking – Among top 5 Companies	5
	International Benchmarking – Among top 10 Companies	7
Credit 4.2	Water Efficiency	
	Reduction in specific water consumption	
	Reduction in specific water consumption ≥ 5%	1
	Reduction in specific water consumption ≥ 10%	2
	Reduction in specific water consumption ≥ 15%	3
	Reduction in specific water consumption ≥ 20%	4
	(OR)	
	Benchmarking	
	National level- Among top 5 companies	3
	International level - Among top 10 companies	4
	Rain water Harvesting - Harvest 95% rainwater run-off from Roof & Non Roof areas	1
	Beyond the fence initiatives	1
Credit 4.3	Renewable Energy	
	On-site renewable energy generation (Both electrical & thermal)	
	≥2.5% ≤ 5% substitution	1
	> 5% substitution	2
	Off-site Renewable Power	
	≥10% substitution	1
	≥20% substitution	3
	≥30% substitution	5
	Sub Total	20

	(OR)	
	GreenCo Platinum / Gold	20
	GreenCo Silver	15
	GreenCo Bronze	10
ļ	5 Waste Management	
Credit 5.1	Waste Utilisation & Disposal	
	Wood waste	
	Used as fuel	2
	Converted into value added products	5
Credit 5.1	Non wood	
	> 5%reduction in waste going to landfill	1
	> 10%reduction in waste going to landfill	3
	> 15%reduction in waste going to landfill	5
	Sub Total	10
	6 Life Cycle Approach	
Credit 6.1	Design for Life Cycle Analysis	4
Credit 6.2	Measures taken & Quantification of benefits achieved	
	- Implementation of at least one initiative	1
	- 2% impact reduction	2
	- 4% impact reduction	3
	- 6% impact reduction	4
	- 8% impact reduction	5
	- 10% impact reduction	6
	OR	
	Sub Total	10
•	7 Product Stewardship	
Credit 7.1	Education/ Community Outreach and Engagement	
	> 10% of people involved in handling the product after	1
	despatch and users	1
	> 20% of people involved in handling the product after despatch and users	2

Credit 7.2	Extended Producer Responsibility			
	Institute a system for product take-back for recycling or safe disposal			
	Institute a system for packaging materials take back for reuse or recycling			
	Sub Total	5		
8	Innovation			
Credit 8.1	Innovations	4		
Credit 8.2	Other Credentials, Awards and Accolades	1		
	Sub Total	5		
	Total Points	100		

GREEN PRODUCTS RATING STANDARD FOR FURNITURE (NON-WOOD & WOOD)

1.0 Product Design

Eco-Vision Points: 5

Intent:

To design the product holistically considering all the environmental attributes, so as to minimize associated impacts

Award of points:

Provide the details of the Eco Vision to action as per the following for achieving excellence in design of the products that would result in environmental, health & wellbeing benefits.

- Eco-Vision statement
- Strategies adopted, resource allocation, stake holder engagement, Implemented measures & Impacts
 - At design stage
 - At manufacturing

Credits	Criteria	Credit Points
	Product Design	
Credit 1.1	Eco - Vision statement	1
	Strategies adopted, resource allocation, stake holder engagement, Implemented measures & Impacts	
	- At design stage of the product	2
	- At manufacturing stage of the product	2

Exemplary Performance:

This credit is not eligible for exemplary performance under Innovation Credit.

- 1. Eco Vision statement
- 2. Strategies adopted at design & manufacturing stage to achieve eco vision
 - a. Proof for resource allocation for improving the design of the product & manufacturing of the product
 - b. Details of employees and stakeholders engaged
- 3. Details of measures taken at design stage and manufacturing stage of product with quantification of benefits.

2.0 Product Performance

Credit 2.1: Minimize Air Contaminants Concentration Points: 30

Intent:

Reduce exposure to chemicals contaminants from furniture during use which cause severe impact on health of occupants.

Mandatory requirement:

Test the following as per specified standards:

Formaldehyde
 TVOC
 ISO 16000 – 3
 ISO 16000 – 6

- 3. Total aldehydes
- 4. 4 Phenyl cyclohexene

Air chamber test or perforation methods can be used for testing the above parameters.

Award of points:

As per Indian Green Building Council, the emission limits for the identified contaminants are as below.

Contaminants	For System Furniture	For Seating
TVOC	0.5 mg/m ³	0.25 mg/m ³
Formaldehyde	50 ppb	25 ppb
Total Aldehydes	100 ppb	50 ppb
4 Phenyl cyclohexene	0.0065 mg/m ³	0.00325 mg/m ³

If the product achieves the above emission limits, the credit points will be awarded as below.

	Product Performance	Points
Mandatory Requirement*	Testing of Emission parameters as per ISO 16000-3 / ISO 16000-6 or equivalent standards	
Credit 2.1	Minimise air contaminants concentration	
	Formaldehyde (Methanal)	10
	TVOC	10
	Total Aldehydes	5
	4-Phenylcyclehexene (4-PCH)	5

Exemplary Performance:

This credit is not eligible for exemplary performance

Documentation Required:

1. Test certificates as per the specified standards.

3.0 Raw Materials

For Non-Wood Furniture

Credit 3.1: Recycled Material

Intent:

Reduce virgin material consumption by increasing the recycled content at the time of manufacturing.

Mandatory Requirement

Use minimum 5 % of total weight of recycled material on weighted average basis of furniture

Award of Points

	Raw Material – Non Wood Furniture	
Mandatory Requirement*	Use of recycled material, minimum weighted average 5% of total weight of furniture.	
Credit 3.1	Recycled material used as Raw material	
	>5% of final product	2
	>10% of final product	4
	>15% of final product	6
	>20% of final product	8
	>25% of final product	10

Exemplary Performance:

This credit is eligible for exemplary performance under Innovation Credit.

- 1. Quantity of recycled materials purchased annually
- 2. Production details per annum

For Wood Furniture

Credit 3.1: Use of Rapidly Renewable / Recycled Material Points: 10

Intent:

Encourage the use of rapidly renewable materials in furniture to reduce deforestation. Rapidly renewable materials are agricultural products that take 10 years or less to harvest.

Mandatory Requirement

Wood for furniture production to be sourced from legal and verifiable source.

Award of points

	Raw Materials - Wood Furniture	
Mandatory Requirement*	Legal and verifiable source of wood	
Credit 3.1	Use of Rapidly Renewable Material	
	>5% of product part	2
	>10% of product part	4
	>15% of product part	6
	>20% of product part	8
	>25% of product part	10

Exemplary Performance:

This credit is not eligible for exemplary performance under Innovation Credit.

- 1. Certification / Declaration on legal and verifiable source of raw material.
- 2. Quantity of rapidly renewable material purchased per annum
- 3. Production details per annum

Credit 3.2: Green Supply Chain Management

Intent:

Encourage the product manufacturers to educate the suppliers on green concepts and adopt green procurement guidelines for enhancing the green performance in supply chain.

Award of points

Credit 3.2	Green Supply Chain Management	Points
	Education and Awareness	
	≥ 50% Suppliers	1
	≥ 80% Suppliers	3
	Green Procurement Guidelines	
	Green Procurement Guidelines for industry	2

Exemplary Performance:

This credit is not eligible for exemplary performance under Innovation Credit.

- 1. Details of efforts taken for educating the suppliers.
- 2. Green procurement guidelines

4.0 Manufacturing Process

Credit 4.1: Energy Efficiency

Intent:

Enhance energy efficiency in the manufacturing process of the product, to reduce environmental impacts.

Award of points:

Establish specific consumption of the plant and monitor on a continuous basis

Implement energy efficiency improvement projects or technologies for reducing the energy consumption.

Credits	Criteria	Credit Points
	Manufacturing Process	
Credit 4.1	Energy Efficiency	
	Reduction in specific energy consumption ≥ 5%	1
	Reduction in specific energy consumption ≥ 10%	2
	Reduction in specific energy consumption ≥ 15%	3
	Reduction in specific energy consumption ≥ 20%	5
	Reduction in specific energy consumption ≥ 25%	7
	(OR)	
	Benchmarking	
	National Benchmarking – Among top 5 Companies	5
	International Benchmarking – Among top 10 Companies	7

Exemplary Performance:

This credit is eligible for exemplary performance under Innovation Credit, provided, the measures implemented for reducing the energy consumption are innovative and resulted in significant reduction in energy consumption

Documentation Required:

- 1. Details of annual production, energy consumption & specific energy consumption for the preceding 3 years
- 2. Details of National Benchmark & International Benchmark data with comparisons
- 3. Details of implementation of energy efficiency improvement measures with actual benefits achieved

Note:

Manufacturing units which are in operation for less than 2 years need to demonstrate a system in place for specific energy consumption monitoring and provide the Benchmarking details as highlighted in point no: 2.

Credit 4.2: Water Efficiency

Intent:

Incorporate water efficiency measures in the manufacturing process to reduce potable water consumption and implement measures to benefit the society at large.

Award of points:

Implement water efficient measures & technologies and recycle* waste water generated from the plant to reduce the fresh water consumption.

Harvest or Capture minimum of 95% of rain water runoff from roof & non roof areas of the manufacturing facility

Implement measures for improving the availability of portable water beyond the fence for the benefit of the local community

Credits	Criteria	Credit Points
	Manufacturing Process	
Credit 4.2	Water Efficiency	
	Reduction in specific water consumption	
	Reduction in specific water consumption ≥ 5%	1
	Reduction in specific water consumption ≥ 10%	2
	Reduction in specific water consumption ≥ 15%	3
	Reduction in specific water consumption ≥ 20%	4
	(OR)	
	Benchmarking	
	- Among top 5 units National level	3
	- Among top 5 units International level	4
	Rain water Harvesting - Harvest 95% rainwater run-off from Roof & Non Roof areas	1
	Beyond the fence initiatives	1

^{*-} Recycling of water can be factored into the reduction in specific water consumption

Exemplary Performance:

This credit is eligible for exemplary performance under Innovation, if the facility achieves the status of "Zero effluent Discharge"

(OR)

The measures taken exceed the threshold mentioned in the compliance options.

Documentation Required:

- 1. Details of annual water consumption & Specific water consumption for 3 years
- 2. Details of National Benchmark & International Benchmark data with comparisons
- 3. Rain water harvesting system installed and quantity of water harvested annually
- 4. Details of the beyond the fence initiatives and the benefits

Note:

Manufacturing units which are in operation for less than 2 years need to demonstrate a system in place for specific water consumption monitoring and provide the Benchmarking details as highlighted in point no: 2.

Credit 4.3: Renewable Power

Points: 7

Intent:

Encourage the use of on-site & off site renewable energy sources to reduce the dependence on fossil fuels and their associated environmental impacts.

Award of points:

Install on-site & off-site renewable energy system to reduce dependence on fossil fuels.

Credits	Criteria	Credit Points
	Manufacturing Process	
Credit 4.3	Renewable Energy	
	On-site renewable energy generation (Both electrical & thermal)	
	≥2.5% ≤ 5% substitution	1
	> 5% substitution	2
	Off-site Renewable Power	
	≥10% substitution	1
	≥20% substitution	3
	≥30% substitution	5

A company is eligible for claiming the allotted points to the threshold level of 5 Credits if they have done exceedingly in either on-site or Off site renewable energy generation.

Exemplary Performance:

This credit is eligible for exemplary performance under Innovation Credit, if the contribution from the renewable energy sources is more than 40% of the annual energy requirement of the manufacturing facility

- 1. Details of installation of onsite and offsite renewable power generating sources including the technology, installed capacity and location with photographs of installations.
- 2. Details of total power consumption in the manufacturing facility and renewable power produced in kWh

5.0 Waste Management

Mandatory requirements

Compliance to local regulations on solid, liquid and gaseous wastes discharged from the manufacturing location.

Intent

To ensure that the solid, liquid & gaseous wastes discharged from the plant complies with all local regulations.

Compliance options

Compliance certificate from State Pollution Control Board

Credit 5.1: Waste Utilization & Disposal

Intent:

Encourage appropriate handling, create wealth out of waste or proper disposal of wastes generated during manufacturing, thereby reducing environmental impacts and enhance health & wellbeing of the society.

Award of points:

Non wood furniture:

- 1) Segregate the wastes into recyclable & non recyclable wastes
- 2) Maximize the utilization of recyclable wastes and reduce the non-recyclable wastes going to land fill

Wood furniture:

- 1) Increase the % of utilization of wood wastes in the order of enhanced value addition by giving primary importance for converting wood waste into value added products or use as fuel
- 2) Reduce the % of non-wood & other wastes going to land fill

Non-Wood Furniture

	Waste Utilisation & Disposal	
Credit 5.1	Recyclable waste	
	75 - 80% recycled	1
	81 - 85% recycled	2
	86 - 90% recycled	3
	91 - 95 % recycled	4
	> 95% recycled	5
Credit 5.2	Non-recyclable Waste	
	> 5%reduction in waste going to landfill	1
	> 10%reduction in waste going to landfill	2
	> 15%reduction in waste going to landfill	3
	> 20% reduction in waste going to landfill	4
	> 25% reduction in waste going to landfill	5

Wood Furniture

	Waste Utilisation & Disposal	
Credit 5.1	Wood waste	
	Used as Fuel	2
	Converted into value added products	5
Credit 5.2	Non wood	
	> 5%reduction in waste going to landfill	1
	> 10%reduction in waste going to landfill	3
	> 15%reduction in waste going to landfill	5

Exemplary Performance:

This credit is eligible for exemplary performance under Innovation Credit, if 100% of the waste generated is utlised through innovative ways and means with higher value addition.

Documentation Required:

Details of the following for the preceding 1 year:

- 1. Details of waste Generated and their quantity by weight or volume
- 2. Details of Utilisation of the wastes and the process of utilisation

6.0 Life Cycle Approach

Credit 6.1 Life Cycle Analysis

Intent:

Identify environmental impact at every stage of the life cycle of the product and initiate measures to reduce such impacts

Award of points:

Carry out Life cycle analysis of the product for the boundary conditions of Cradle to Cardle. i.e. From the raw material sourcing to recycling / disposal of the manufactured products.

The product manufacturer can carry out the life cycle analysis with the support of external service provider or with internal expertise using a LCA software tool.

Based on the Life Cycle impact analysis, implement measures for reducing the environmental impacts.

Credits	Criteria	Credit Points
	Life Cycle Approach	
Credit 6.1	Life Cycle Analysis	4
	Measures taken & Quantification of benefits achieved	
	- Implementation of at least one initiative	1
	- 2% impact reduction	2
	- 4% impact reduction	3
	- 6% impact reduction	4
	- 8% impact reduction	5
	- 10% impact reduction	6
	Sub-total	10

Exemplary Performance:

This credit is eligible for exemplary performance if the implemented measure is innovative and addresses any of the measure that has not been covered as part of the rating system.

- 1. LCA study report with the details of the study conducted and impact analysis
- 2. Details of the measures implemented based on the impact analysis of LCA study and the benefits achieved.

7.0 Product Stewardship

Product stewardship advocates that all those involved in the Life Cycle of product share responsibility for reducing its health and environmental impacts with producers bearing the primary responsibility.

In the Green Product Rating, Product Stewardship credit focuses on the following:

- 1. Education for the Stake holders on Green Products for reaping the intended benefits fully
- 2. Quality management system for minimizing the rejection rate after product dispatch
- 3. Extended producer responsibility increasing the recycling or safer disposal

The credit points are allotted for the focus areas as applicable for the individual product categories.

In case of furniture only education and Quality management system for minimizing the rejection rate are considered.

Credit 7.1: Education Points: 2

Intent:

Educate those involved in handling the product at every stage post-despatch, so as to reap the intended environmental benefits.

Compliance options:

Companies to develop and implement stake holder specific awareness and information sharing programmes for reaping the benefits of Green products at every stage of its life cycle.

Credits	Criteria	Credit Points
7	Product Stewardship	
Credit 7.1	Education / Community Outreach and Engagement	
	> 10% of people involved in handling the product after despatch and users	1
	> 20% of people involved in handling the product after despatch and users	2

Exemplary Performance:

This credit is not eligible for exemplary performance under innovation criteria.

- Details of the stake holders specific awareness or information dissemination programmes about the Green Products, its features and their roles to reap the intended benefits
- 2. Estimation of % of stake holders covered

Credit 7.2: Extended Producer Responsibility

Points: 3

Intent:

Establish a system for take-back for recycling of products at the end of life & packaging materials after use.

Compliance options:

Companies to have an established system to ensure that the take-back of used products for recycling or safe disposal.

Quantify, record and monitor the quantity of used products sent to recyclers / for safe disposal.

Institute a system for packaging materials take back for reuse and recycling.

Credits	Criteria	Credit Points
7	Product Stewardship	
Credit 7.2	Extended Producer Responsibility	
	System for product take back for recycling or safe disposal	2
	System for packaging materials take back for reuse or recycle	1
	Sub-Total	3

Exemplary Performance:

This credit is not eligible for exemplary performance under innovation criteria

Documentation Required:

1. System for packaging materials take back for reuse and recycling.

8.0 Innovation

Credit 8.1 Product Innovation

Intent:

Recognize initiatives that are not addressed in this rating system but have a profound impact in protecting the environment.

Compliance options:

- 1. As part of the credit, the product manufacturer can apply for four innovative measures. If the implemented measures meet any one of the following criteria mentioned below can be considered as an innovative measure.
 - Any environmental measure not covered in the rating but addressed by the manufacturer
 - Any measure surpassing the credit threshold of any of the credits included as part of this rating.
- 2. Receipt of Eco labels, Awards & accolades.

The points for innovative measures are as follows:

Credits	Criteria	Credit Points
8	Innovation	
Credit 8.1	Innovation : Each innovative measure implemented at any stage of Life cycle will gain 1 Credit Point	4
	Other Credentials, Awards and Accolades	1
	Sub-total	5

- 1. Details of the innovative measures highlighting the Intent and the measured Impacts
- 2. Copy of the certificates for the details of Eco-labels, Awards & accolades obtained