



Confederation of Indian Industry

GREEN PRODUCTS RATING

PAINTS

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.

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.

- 1. 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.

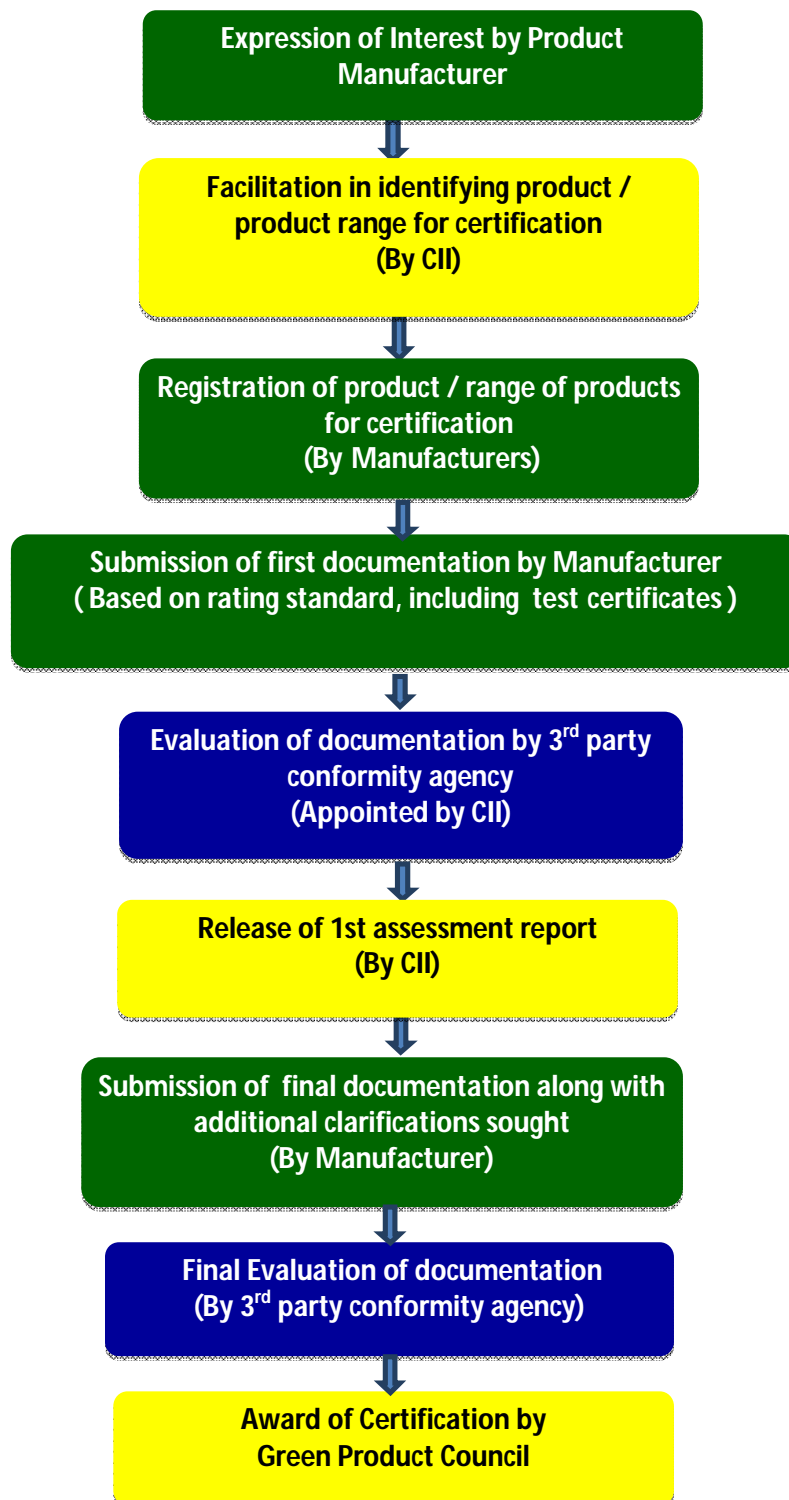
The approach and the Credit Modules for evaluation of products remain by and large the same for all the product categories. However, the credits as part of the individual Credit Modules and the weightage will vary depending upon the product categories and their significance.

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).

6.1 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 www.greenbusinesscentre.com. The fee details can also be obtained through the contact details mentioned in the manual.

10. Upgradation of rating

This Green product rating for Paints 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. Summary of Credits & Points Distribution

Green Product Rating		
Paints		
Credits	Criteria	Credit Points
1	Product Design	
Credit 1.1	<i>Eco - Vision</i>	1
	<i>Strategies adopted, resource allocation, stake holder engagement, Implemented measures & Impacts</i>	
	<i>- At design stage of the product</i>	2
	<i>- At manufacturing stage of the product</i>	2
<i>Sub Total</i>		5
2	Product Performance	
Mandatory Requirement*	1) Product testing for minimum performance as per ASTM 6886 standards 2) Product testing for longevity - Sunshine Weatherometer / QUV	
Credit 2.1	Volatile Organic Compound	
	<i>Comply to IGBC requirement</i>	10
	<i>- 5% reduction over IGBC baseline value</i>	12
	<i>- 10% reduction over IGBC baseline value</i>	15
	<i>- 15% reduction over IGBC baseline value</i>	18
	<i>- 20% reduction over IGBC baseline value</i>	22
	<i>- 25% reduction over IGBC baseline value</i>	26
	<i>Near Zero VOC (More than 25% reduction over IGBC baseline value)</i>	30
<i>Sub Total</i>		30
3	Raw Material	
Mandatory Requirement*	<i>Non-toxic, non- hazardous & non- carcinogenic substances in the product</i>	
Credit 3.1	Elimination of prohibited solvents	
	<i>Aromatic Hydrocarbons</i>	5
	<i>Halogenated Hydrocarbons</i>	5
Credit 3.2	Elimination of Formaldehyde	5

<i>Sub Total</i>		15
4	Manufacturing Process	
Credit 4.1	Energy Efficiency	7
	<i>Reduction in specific energy consumption ≥ 5%</i>	1
	<i>Reduction in specific energy consumption ≥ 10%</i>	2
	<i>Reduction in specific energy consumption ≥ 15%</i>	3
	<i>Reduction in specific energy consumption ≥ 20%</i>	5
	<i>Reduction in specific energy consumption ≥ 25%</i>	7
(OR)		
	Benchmarking	
	<i>National Benchmarking – Among top 5 Companies</i>	5
	<i>International Benchmarking – Among top 10 Companies</i>	7
Credit 4.2	Water Efficiency	6
	Reduction in specific water consumption	
	<i>Reduction in specific water consumption ≥ 5%</i>	1
	<i>Reduction in specific water consumption ≥ 10%</i>	2
	<i>Reduction in specific water consumption ≥ 15%</i>	3
	<i>Reduction in specific water consumption ≥ 20%</i>	4
(OR)		
	Benchmarking	
	<i>- Among top 5 units National level</i>	3
	<i>- Among top 5 units International level</i>	4
	<i>Rain water Harvesting - Harvest 95% rainwater run-off from Roof & Non Roof areas</i>	1
	<i>Beyond the fence initiatives</i>	1
Credit 4.3	Renewable Energy	7
	<i>On-site renewable energy generation (Both electrical & thermal)</i>	
	<i>≥2.5% ≤ 5% substitution</i>	1
	<i>> 5% substitution</i>	2
	<i>Off-site Renewable Power</i>	
	<i>≥10% substitution</i>	1
	<i>≥20% substitution</i>	3
	<i>≥30% substitution</i>	5
<i>Sub Total</i>		20

(OR)		
	GreenCo Platinum / Gold	20
	GreenCo Silver	15
	GreenCo Bronze	10
5	Waste Management	
Mandatory Requirement*	<i>Solid, Liquid and Gaseous Wastes : Compliance to local regulations</i>	
Credit 5.1	<i>Waste Utilisation & Disposal</i>	
	Non Hazardous waste	
	<i>5% reduction in disposal of waste per unit of production</i>	1
	<i>10% reduction in disposal of waste per unit of production</i>	2
	<i>15% reduction in disposal of waste per unit of production</i>	3
	<i>20% reduction in disposal of waste per unit of production</i>	4
	<i>25% reduction in disposal of waste per unit of production</i>	5
	Hazardous Waste	
	<i>> 5%reduction in waste going to landfill</i>	1
	<i>> 10%reduction in waste going to landfill</i>	2
	<i>> 15%reduction in waste going to landfill</i>	3
	<i>> 20% reduction in waste going to landfill</i>	4
	<i>> 25% reduction in waste going to landfill</i>	5
	<i>Sub Total</i>	10
6	Life Cycle Approach	
Credit 6.1	<i>Life Cycle Analysis</i>	4
	<i>Measures taken & Quantification of benefits achieved</i>	
	<i>- Implementation of at least one initiative</i>	1
	<i>- 2% impact reduction</i>	2
	<i>- 4% impact reduction</i>	3
	<i>- 6% impact reduction</i>	4
	<i>- 8% impact reduction</i>	5
	<i>- 10% impact reduction</i>	6
	<i>Sub Total</i>	10
7	Product Stewardship	
Credit 7.1	<i>Education</i>	
	<i>> 10% of people involved in handling the product after despatch and users</i>	1
	<i>> 20% of people involved in handling the product after despatch and users</i>	2

Credit 7.2	<i>Extended Producer Responsibility :</i>	
	<i>Institute a system for product take-back for recycling or safe disposal</i>	2
	<i>Institute a system for container and packaging materials take back for reuse or recycling</i>	1
<i>Sub Total</i>		5
8	Innovation	
Credit 8.1	<i>Innovations</i>	4
Credit 8.2	<i>Other Credentials, Awards and Accolades</i>	1
<i>Sub Total</i>		5
Total Points		100

GREEN PRODUCTS RATING STANDARD FOR PAINTS

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	<i>Eco - Vision statement</i>	1
	<i>Strategies adopted, resource allocation, stake holder engagement, Implemented measures & Impacts</i>	
	<i>- At design stage of the product</i>	2
	<i>- At manufacturing stage of the product</i>	2

Exemplary Performance:

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

Documentation Required:

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

2.0 Product Performance

Credit 2.1: Volatile Organic Compound

Points: 30

Intent:

Reduce exposure to volatile organic compounds, which evaporate during use and cause severe impact on health of the occupants and improve building indoor environment quality

Mandatory requirement

- 1) Test the VOC level of paints as per ASTM D 6886 and produce the results
- 2) Test product for longevity through SunshineWeathero Meter Test or QUV Test

Award of points:

Reduce the VOC content in the paints and comply with IGBC Baseline requirements. IGBC Baseline requirements of VOC limits are as below.

Product Type	VOC Limit (g / L minus Water)
Interior Flat Coating / Primer	50
Interior non Flat Coating / Primer	150
Anti Corrosive / Anti Rust paint	250
Clear wood Finish : Lacquer	550
Clear wood finish : Sanding Sealer	350
Clear wood finish : Varnish	350
Clear Brushing Lacquer	680
Floor coatings	100
Sealers and Undercoaters	200
Shellac : Clear	730
Shellac : Pigmented	550
Stain	250
Concrete curing Compounds	350
Japans / Faux finishing coatings	350

Magnesite cement coatings	450
Pigmented lacquer	550
Water proofing sealers	250
Water proofing concrete / masonry sealers	400
Wood preservatives	350
Low solid coatings	120*
* VOC Levels for low solids coatings are measured in grams of VOC per litre of material including water	

Credits	Criteria	Credit Points
	Product Performance	
Mandatory Requirement*	1) Product testing for minimum performance as per ASTM 6886 standards 2) Product testing for longevity - Sunshine Weatherometer / QUV	
Credit 2.1	Volatile Organic Compound	
	Comply to IGBC requirement	10
	- 5% reduction over IGBC baseline value	12
	- 10% reduction over IGBC baseline value	15
	- 15% reduction over IGBC baseline value	18
	- 20% reduction over IGBC baseline value	22
	- 25% reduction over IGBC baseline value	26
	Near Zero VOC (More than 25% reduction over IGBC baseline value)	30

Exemplary Performance:

This credit is not eligible for exemplary performance

Documentation Required:

1. Test certificate of products as per ASTM D 6886

3.0 Raw Materials

Intent:

Eliminate exposure to heavy metals, release of solvents and preservatives that can lead to long term health effects either through respiration / direct contact.

Mandatory Requirement

Product shall not contain mercury, lead, cadmium, hexavalent chromium, arsenic & antimony. Product may contain impurities / traces deriving from raw materials. Sum of all metal concentration shall not exceed 0.1% (1000 ppm).

Test the product as per the standards specified below and produce the test certificates.

Lead	-	ISO 3856-1 or ASTM D 3335
Cadmium	-	ISO 3856-4 or ASTM D 3335
Hexavalent Chromium-		ISO 3856-5
Mercury	-	ISO 3856-7 or ASTM-D 3624

Submittals

Test certificates compliance to the absence of Mercury, lead, cadmium, hexavalent Chromium, arsenic & antimony

Credit 3.1: Elimination of prohibited solvents**Points: 10****Intent:**

Eliminate exposure to release of solvents that can lead to long term health effects either through respiration / direct contact.

Compliance options:

The following shall not be used during manufacturing process

1. Aromatic Hydrocarbons which affects the human reproductive system
2. Halogenated Hydrocarbons which has Ozone depletion potential & toxic to human health

Carry out the tests as per the following standards

1. Aromatic Hydro carbon - ASTM D 3257
2. Halogenated Hydro carbon - ASTM D 4457

If there are contaminations through the raw materials & other sources, the contaminations can be within the specified limits as below.

Sno	Product	Aromatic Hydro Carbon (Contamination by weight)	Halogenated Hydro Carbon (Contamination by weight)
1	Emulsion paint	Shall not exceed 0.1%	As per Indian std
2	Water based paints & varnishes	Shall not exceed 1.0%	Shall not be used
3	Solvent based paints & varnishes	Shall not exceed 5.0%	As per Indian std

Credits	Criteria	Credit Points	Breakup
Credit 3.1	Elimination of prohibited solvents	10	
	Aromatic Hydrocarbons		5
	Halogenated Hydrocarbons		5

Exemplary Performance:

This credit is not eligible for exemplary performance under Innovation Credit

Documentation Required:

1. Declaration from the manufacturer highlighting that Aromatic and Halogenated Hydro carbons are not utilized in the process
2. Test certificates as per the standards specified complying to the limits in case of contaminations

Credit 3.2: Elimination of Formaldehyde**Points: 10****Intent:**

Eliminate exposure to formaldehyde that can lead to long term health effects such as cancer either through respiration / direct contact

Compliance options:

Formaldehyde, as it is a carcinogenic substance shall not be used as preservative in the paints

Test product for formaldehyde by small chamber method.

Credits	Criteria	Credit Points	Breakup
	Raw Material		
Credit 3.2	Elimination of Formaldehyde	10	

Exemplary Performance:

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

Documentation Required:

1. Test certificate conforming the absence of formaldehyde

4.0 Manufacturing Process

Credit 4.1: Energy Efficiency

Points: 7

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	
	<i>Reduction in specific energy consumption \geq 5%</i>	1
	<i>Reduction in specific energy consumption \geq 10%</i>	2
	<i>Reduction in specific energy consumption \geq 15%</i>	3
	<i>Reduction in specific energy consumption \geq 20%</i>	5
	<i>Reduction in specific energy consumption \geq 25%</i>	7
	(OR)	
	Benchmarking	
	<i>National Benchmarking – Among top 5 Companies</i>	5
	<i>International Benchmarking – Among top 10 Companies</i>	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**Points: 6****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	
	<i>Reduction in specific water consumption \geq 5%</i>	1
	<i>Reduction in specific water consumption \geq 10%</i>	2
	<i>Reduction in specific water consumption \geq 15%</i>	3
	<i>Reduction in specific water consumption \geq 20%</i>	4
	(OR)	
	Benchmarking	
	<i>- Among top 5 units National level</i>	3
	<i>- Among top 5 units International level</i>	4
	<i>Rain water Harvesting - Harvest 95% rainwater run-off from Roof & Non Roof areas</i>	1
	<i>Beyond the fence initiatives</i>	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	
	<i>On-site renewable energy generation (Both electrical & thermal)</i>	
	$\geq 2.5\% \leq 5\%$ substitution	1
	$> 5\%$ substitution	2
	<i>Off-site Renewable Power</i>	
	$\geq 10\%$ substitution	1
	$\geq 20\%$ substitution	3
	$\geq 30\%$ 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

Documentation Required:

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**Points: 8****Intent:**

Encourage appropriate handling and disposal of waste during manufacturing, thereby reducing environmental impacts and enhance health & wellbeing of the society.

Award of points:

Minimize wastes through 'reduce, reuse and recycle' techniques. Reduce waste disposal to landfill

Credits	Criteria	Credit Points
	Waste Management	
Credit 5.1	<i>Waste Utilisation & Disposal</i>	
	Non Hazardous waste	
	<i>10% reduction in disposal of waste per unit of production</i>	1
	<i>15% reduction in disposal of waste per unit of production</i>	2
	<i>20% reduction in disposal of waste per unit of production</i>	3
	<i>25% reduction in disposal of waste per unit of production</i>	4
	Hazardous Waste	
	<i>> 5%reduction in waste going to landfill</i>	1
	<i>> 10%reduction in waste going to landfill</i>	2
	<i>> 15%reduction in waste going to landfill</i>	3
	<i>> 20% reduction in waste going to landfill</i>	4

Exemplary Performance:

This credit is eligible for exemplary performance under Innovation Credit, if 100% of the waste generated is utilised 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
3. Details of the wastes handed over to Approved Common Hazardous Wastes Treatment Storage and Disposal Facility (TSDF) for past 3 years

6.0 Life Cycle Approach

Credit 6.1 Life Cycle Analysis

Points: 10

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 Cradle. 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	<i>Life Cycle Analysis</i>	4
	<i>Measures taken & Quantification of benefits achieved</i>	
	- <i>Implementation of at least one initiative</i>	1
	- <i>2% impact reduction</i>	2
	- <i>4% impact reduction</i>	3
	- <i>6% impact reduction</i>	4
	- <i>8% impact reduction</i>	5
	- <i>10% impact reduction</i>	6

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

Documentation Required:

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 Construction Blocks 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	<i>Education</i>	
	<i>> 10% of people involved in handling the product after despatch and users</i>	1
	<i>> 20% of people involved in handling the product after despatch and users</i>	2

Exemplary Performance:

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

Documentation Required:

1. 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: Ensure Quality & Minimise Rejection Rate**Points: 4****Intent:**

Minimize rejection rate during dispatch & storage and ensure that the quality of product is maintained till delivery to the end user.

Compliance options:

Companies to have a Quality management system to ensure that the quality of the products is maintained as per the requirements during dispatch and storage, until the final delivery.

Quantify, record and Monitor the rejection of the products after the dispatch.

Credits	Criteria	Credit Points
7	Product Stewardship	
Credit 7.2	<i>Quality maintenance & Minimisation of Rejection Rate</i>	
	<i>4% reduction in rejection rate during dispatch & storage</i>	1
	<i>6% reduction in rejection rate during dispatch & storage</i>	2
	<i>8% reduction in rejection rate during dispatch & storage</i>	3
	<i>10% reduction in rejection rate during dispatch & storage</i>	4

Exemplary Performance:

This credit is not eligible for exemplary performance under innovation criteria

Documentation Required:

1. Details of the quality management system to bring down the rejection rate after the dispatch of the products
2. Details of the quantify of product dispatched and the rejection rate

7.3 Extended Producer Responsibility

Points: 1

Intent

To encourage manufacturers to institute a mechanism for product take-back for recycling or safe disposal at the end of useful life.

Compliance options:

The company is encouraged to have a mechanism for product take back which would involve:

- ❖ Collection
- ❖ Environmentally sound treatment of collected product
- ❖ Use of product & materials in the form of reuse or recycling

The company has to employ an environmentally friendly procedure or method to disposed off products that cannot be reused or recycled. The disposal method to comply with the Law of the country

Credits	Criteria	Credit Points
	Product Stewardship	
Credit 7.3	<i>Extended Producer Responsibility : Institute a system for product take-back for recycling or safe disposal</i>	1

Exemplary Performance:

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

Documentation Required:

1. Details of the mechanism in place for product take back

8.0 Innovation

Credit 8.1 Product Innovation

Points: 5

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	<i>Innovation : Each innovative measure implemented at any stage of Life cycle will gain 1 Credit Point</i>	4
	<i>Other Credentials, Awards and Accolades</i>	1

Documentation Required:

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