Confederation of Indian Industry

GREEN PRODUCTS CERTIFICATION

BUILDING INSULATION MATERIALS

Version -1

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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 Certification'.

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 Certification?

The Green Product Certification is a tool for facilitating Green Product market transformation in the country. The Green Products Certification 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 Certification – Life Cycle Approach

The Green Products Certification adopts a holistic approach based on the 'Life Cycle' of the product. The Certification 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 Certification 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 Certification for the product manufacturers are highlighted below:

1. Green product Certification 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 Certification 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 Certification for the buildings

4. National Priorities addressed in Certification

The Green Product Certification 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 Certification 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 Certification 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 Certification 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 Certification Standards

Green product Certification applies product specific **'Certification Standards'** for evaluating the products. The Certification 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 Certification

The Certification system follows prescriptive as well as performance based approach for evaluating a product. The Certification 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 Certification system evaluates green features for products based on various performance parameters grouped under the following Credit Modules.

1. **Product Design:** The Certification 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 Certification 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 Certification recognises the efforts taken by the product manufacturer to reduce the resource consumption during the manufacturing process

5. **Waste Management:** The Certification 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 Certification encourages the product manufacturer to carryout Life cycle analysis for the products and implement measures based on the impact analysis.
7. **Product Stewardship:** The Certification recognizes the measures implemented by the product manufacturers to reduce environmental impact in product transportation and recycling / product disposal
8. **Innovation:** The Certification 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 Certification standard.

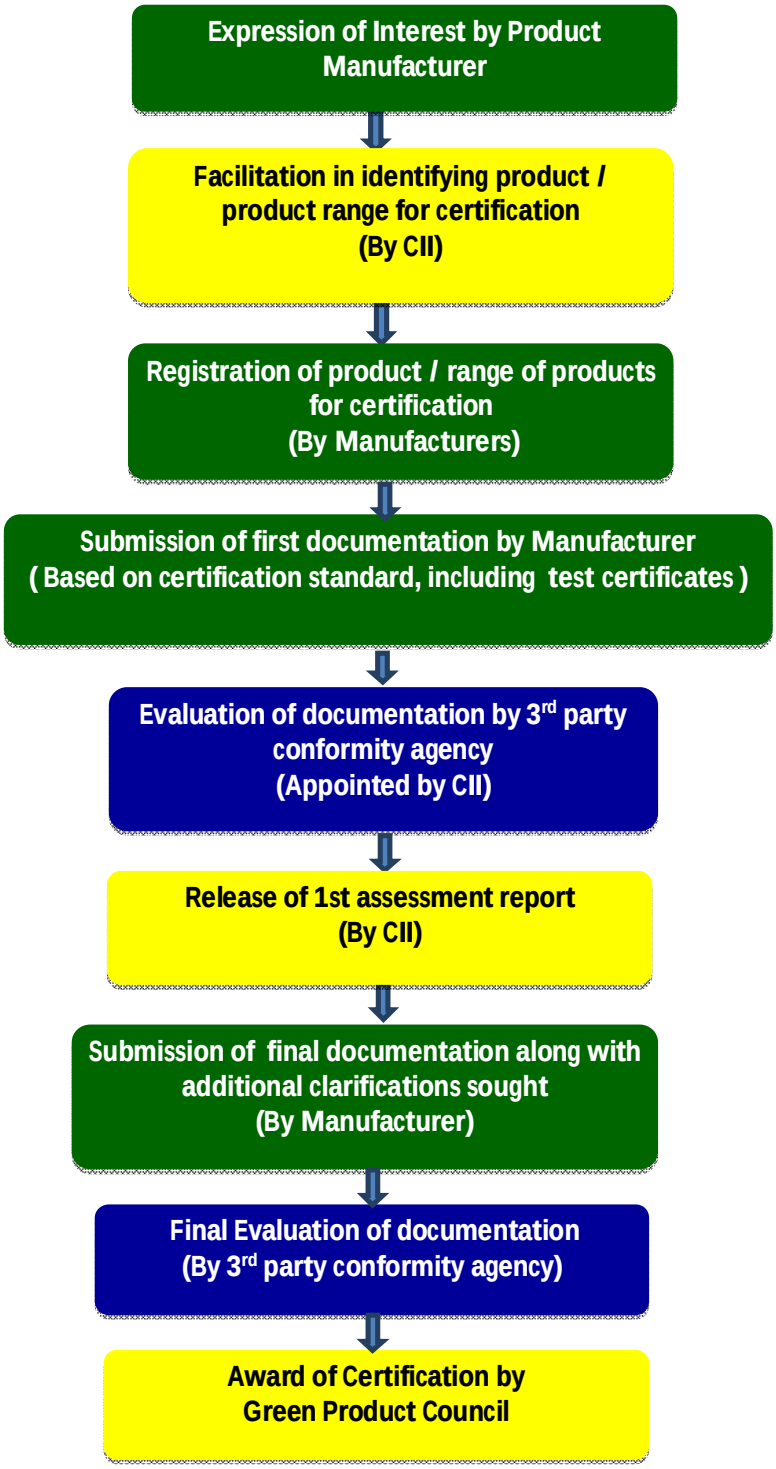
The approach and the Credit Modules for evaluation of products remain by and large the same for all the product categories. However, the credits as part of the individual Credit Modules and the weightage will vary depending upon the product categories and their significance.

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 Certification.

6. *Methodology of Certification*

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



6.1 Product testing

The Green Product Certification calls for testing of select product parameters for the award of Certification. The product parameters will vary depending upon product categories. Wherever testing of the products is specified, the Certification 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 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.

8. Validity of the Certification

The Green product 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 need to apply for the renewal of the Green product Certification.

Before the end of the validity period, the product manufacturer can attempt for higher level of Certification 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 Certification.

9. Fee for Green product Certification

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 Certification

This Green product Certification for Building Insulation Materials 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 Certification		
Building Insulation Materials		
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**	
Credit 2.1	***Thermal Conductivity***	
	Thermal Conductivity – K Value: 0.045 W/mK – 0.040 W/mK	*5*
	Thermal Conductivity – K Value: 0.039 W/mK – 0.035 W/mK	*10*
	Thermal Conductivity – K Value: 0.034 W/mK – 0.030 W/mK	*15*
	Thermal Conductivity – K Value < 0.030 W/mK	*20*
Sub Total		***20***
3	**Raw Material**	
Mandatory Requirement*	*Shall not contain hazardous substances such as Tin, Lead, Mercury, Cadmium and Chromium*	
Credit 3.1	***Recycled Content***	
	Recyled content of 20%	2
	Recycled content > 20%≤ 25%	4
	Recycled content > 25%≤ 30%	6
	Recycled content > 30%≤ 35%	8
	Recycled content > 35%≤ 40%	10
	Recycled content > 40%≤ 45%	12
	Recycled content > 45%≤50%	14
	Recycled content > 50%≤ 55%	16
	Recycled content > 55%≤ 60%	18
	Recycled content > 60%	20
Credit 3.2	***Elimination of prohibited flame retardants***	

	Proper disposal of flame retardants	*2*
	Total elimination of flame retardants	*4*
Credit 3.3	***Elimination of Ozone depleting & Global warming substances***	*5*
	Sub Total	***29***
4	**Manufacturing Process**	
Credit 4.1	***Energy Efficiency***	**7**
	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***	**6**
	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
Credit 4.3	***Renewable Energy***	**7**
	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**	
Mandatory Requirement*	*Solid, Liquid and Gaseous Wastes : Compliance to local regulations*	
Credit 5.1	*Waste Utilisation & Disposal*	
	Non Hazardous waste	
	10% reduction in disposal of waste per unit of production	1
	15% reduction in disposal of waste per unit of production	2
	20% reduction in disposal of waste per unit of production	3
	25% reduction in disposal of waste per unit of production	4
	Hazardous 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
Sub Total		**8**
6	**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***
7	**Product Stewardship**	
Credit 7.1	*Education*	

	> 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
Credit 7.2	*Extended Producer Responsibility : Mechanism for product take-back for recycling or safe disposal*	1
	Sub Total	**3**
8	**Innovation**	
Credit 8.1	*Innovations*	4
Credit 8.2	*Other Credentials, Awards and Accolades*	1
	Sub Total	**5**
	Total Points	***100***

GREEN PRODUCTS CERTIFICATION STANDARD FOR BUILDING INSULATION MATERIALS

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.

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: Thermal Conductivity 'K' Value — Points: 20

Intent:

Enhance the thermal performance of the insulation during its use, thereby leading to energy efficiency and associated environmental benefits.

Award of points:

Ensure high thermal performance of the insulation for its use thereby enhancing the energy performance.

Carryout thermal conductivity test at 20ºC as per ASTM C1363-11: Standard Test Method for Thermal Performance of Building Materials.

Credits	*Criteria*	Credit Points
2	**Product Performance**	
Credit 2.1	***Thermal Conductivity***	
	Thermal Conductivity – K Value: 0.045 W/mK – 0.040 W/mK	*5*
	Thermal Conductivity – K Value: 0.039 W/mK – 0.035 W/mK	*10*
	Thermal Conductivity – K Value: 0.034 W/mK – 0.030 W/mK	*15*
	Thermal Conductivity – K Value < 0.030 W/mK	*20*

Exemplary Performance:

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

Documentation Required:

Test certificate for K value of the insulation as per ASTM C1363-11.

3.0 Raw Materials

Mandatory requirement

Shall not contain hazardous substances such as Tin, Lead, Mercury, Cadmium or Chromium.

Intent

To ensure that the product is safe throughout its life cycle i.e., to manufacture, use & dispose.

Compliance option:

Test products for the presence of heavy metals – Tin, Lead, Mercury, Cadmium or chromium.

Test certificate declaring the absence of heavy metals.

Credit 3.1: Recycled Content Points: 20

Intent:

Reduce virgin material consumption by increasing the recycled content at the time of manufacturing, by the use of post-consumer materials.

Award of points:

Utilization of recycled content in manufacturing of insulation materials for more than 20% by weight will gain credit points as mentioned below.

Credits	*Criteria*	Credit Points
	Raw Material	
Credit 3.1	***Recycled Content***	
	Recyled content of 20%	2
	Recycled content > 20%≤ 25%	4
	Recycled content > 25%≤ 30%	6
	Recycled content > 30%≤ 35%	8
	Recycled content > 35%≤ 40%	10
	Recycled content > 40%≤ 45%	12
	Recycled content > 45%≤50%	14
	Recycled content > 50%≤ 55%	16
	Recycled content > 55%≤ 60%	18
	Recycled content > 60%	20

Exemplary Performance:

This credit is eligible for exemplary performance under Innovation Credit, if the recycled content in manufacturing of insulation materials exceeds 70% by weight.

Credit points will be awarded in proportion to the increase in % of recycled content utilization.

Documentation Required:

1. Declaration by the manufacturer highlighting the % of recycled content by weight in the product / product range applied for Certification

2. Details of Annual production, quantity of purchased materials for recycling and raw materials purchased.

Credit 3.2: Elimination of prohibited flame retardants Points: 4

Intent:

Encourage companies to eliminate the use of prohibited flame retardants in the insulation and explore alternates for the same.

Award of points:

Eliminate the use of prohibited flame retardants in the manufacturing process of insulation materials.

In the case flame retardants being used in the manufacturing process, the used chemicals shall be properly disposed.

Credits	*Criteria*	Credit Points
	Raw Material	
Credit 3.2	***Elimination of prohibited flame retardants***	
	Proper disposal of flame retardants	*2*
	Total elimination of flame retardants	*4*

Exemplary Performance:

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

Documentation Required:

1. Declaration from the manufacturer about complete elimination of flame retardants
2. If the flame retardants are used, details of disposal of flame retardants

Credit 3.3: Elimination of Ozone depleting & Global warming substances

Points: 5

Intent:

Encourage companies to eliminate ozone depleting & potential global warming substances during the manufacturing process of insulation materials.

Award of points:

Eliminate the use of ozone depleting & potential global warming substances during the manufacturing process of insulation materials.

3	**Raw Material**	
Credit 3.3	***Elimination of Ozone depleting & Global warming substances***	*5*

Exemplary Performance:

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

Documentation Required:

1. Declaration from the manufacturer about complete elimination of ozone depleting & global warming substances

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***	
	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 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	
	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

Documentation Required:

1. Details of installation of onsite and offsite renewable power geneCertification 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	*Waste Utilisation & Disposal*	
	Non Hazardous waste	
	10% reduction in disposal of waste per unit of production	1
	15% reduction in disposal of waste per unit of production	2
	20% reduction in disposal of waste per unit of production	3
	25% reduction in disposal of waste per unit of production	4
	Hazardous 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

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
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 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*

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 Certification 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 Certification, 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	*Education*	
	> 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.

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

7.2 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	*Extended Producer Responsibility : Institute a system for product take-back for recycling or safe disposal*	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 Certification 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 Certification but addressed by the manufacturer

    - Any measure surpassing the credit threshold of any of the credits included as part of this Certification

2. Receipt of Eco labels, Awards & accolades

The points for innovative measures are as follows:

Credits	*Criteria*	Credit Points
	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

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