Confederation of Indian Industry

# GreenPro Certification Standard for

# Lighting System

## Draft Version 1.0

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## 1. *GreenPro Certification – Life Cycle Approach*

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

1. Product Design
2. Procurement of Raw materials
3. Manufacturing
4. Use
5. Disposal / Recycling

## 2. *Benefits*

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

<u>For Product Manufacturers</u>

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

1. GreenPro 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 of waste etc., during the manufacturing process and hence enables increase in profitability
5. Acts as a driver for achieving environment excellence
6. Complements National & International Green Building Certification Systems

For Users

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

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

1. Time and effort in carrying out due diligence in selecting a green product is saved
2. The user is assured of the performance of the product and equipment
3. Ensures Toxic and hazardous substances free products which in turn decreases "health and wellbeing" risks 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

## *3. National Priorities addressed in Certification*

GreenPro 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.

A combination of improving energy efficiency and the use of renewable energy leads to support the government's efforts on Climate Change issues.

## *4. Development of GreenPro Certification Standards*

GreenPro 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 the 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 *etcl.* The product committee is chaired by an expert who is also an unbiased specifier.

## *5. Features of GreenPro 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 the 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 the manufacturer to demonstrate its top management commitment towards improvement of the environmental performance 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 the use of re-cycled material and elimination of toxic and hazardous content in the input materials for product manufacturing.
4. **Manufacturing Process:** The green product Certification recognizes 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 reduce the generation of wastes or safer disposal of the wastes generated during manufacturing process
6. **Life Cycle Approach:** The Certification encourages the product manufacturer to carry out Life cycle analysis for the products and implement measures to reduce the overall life-cycle environmental impacts based on such an analysis.
7. **Product Stewardship:** The Certification recognizes the measures implemented by the product manufacturers to reduce environmental and health impacts in product transportation, use and recycling / disposal

8. **Innovation:** The Certification recognizes the innovative measures implemented by the product manufacturer which had resulted in substantial reduction in environment impact exceeding the threshold level specified in the Certification standard.

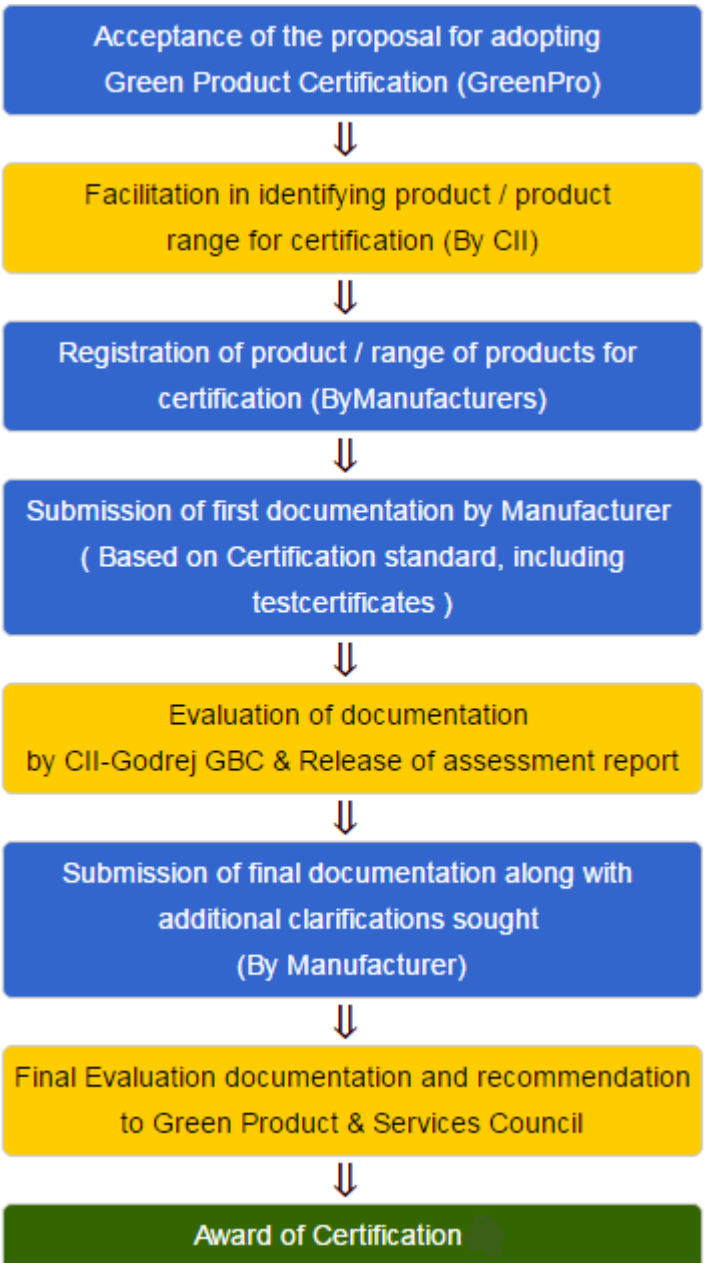
The approach and the Credit Modules for evaluation of products remain by and large the same for all the product categories. However, the credits as part of the individual Credit Modules and the weightage will vary depending upon the product categories and their significance.

**A Product needs to comply with certain specified mandatory requirements. 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 the **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 must submit the details of the test procedures & methodology for verification.

If the product testing needs 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 a member of international bodies such as International Laboratory Accreditation Co-operation (ILAC), Asia Pacific Laboratory Accreditation Co-operation (APLAC) etc.

## 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 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*

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

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

## *9. Updating the Standard*

GreenPro Certification Standard for Lighting Systems is the result of Green Products and Services Council's efforts towards facilitating market transformation in Green Building Products. The Council's endeavor is to periodically update the standard and raise the bar.

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

| GreenPro Certification – Lighting System | | |
|---|---|---|
| ***Scope: Cover all generic purpose 'Lighting Systems' for interiors, exteriors and aesthetic applications*** | | |
| **Credits** | ***Criteria*** | **Proposed 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** | **Energy Efficiency** | |
| | *Luminaire Efficacy based on IESNA LM 79 testing* | |
| | Efficacy ≥ 90 | *10* |
| | Efficacy ≥ 105 | *20* |
| | Efficacy ≥ 120 | *30* |
| **Credit 2.2** | **Photobiological Safety** | |
| | *Photobiological Safety of Lighting System* | |
| | *Luminaires to meet minimum limits for below emission parameters* | 5 |
| | Actinic UV < 0.001 W/m² | |
| | Near UV < 10 W/m² | |
| | Blue Light < 100 (10000 s) W/m²*sr | |
| | Retinal Thermal < 28000/α (345679) W/m²sr | |
| | IR Radiation, eye < 100 W/m² | |
| **Credit 2.3** | **Comfort** | |
| | *Product Performance – Comfort, Health & Wellbeing* | |
| | Color Rendering Index, Ra ≥ 85 | 5 |
| | *UGR – Unified Glare Rating testing using lighting simulation in validated lighting simulation tools* | |
| | UGR ≤ 19 | 5 |
| ***Sub Total*** | | **45** |
| **3** | **Raw Material** | |
| **Credit 3.1** | ***Raw Material Requirements*** | |
| | Elimination of Hazardous Substances | 10 |
| | Component suppliers to meet ISO 14001 – Environment Management System requirements | 5 |
| ***Sub Total*** | | **15** |
| **4** | **Manufacturing Process** | |
| **Credit 4.1** | ***Energy Efficiency*** | **3** |
| | *Reduction in specific energy consumption ≥ 5%* | 1 |

| | | |
|---|---|---|
| | *Reduction in specific energy consumption ≥ 10%* | 2 |
| | *Reduction in specific energy consumption ≥ 15%* | 3 |
| **Credit 4.2** | ***Water Efficiency*** | **3** |
| | *Reduction in specific water consumption* | 1 |
| | *Implementation of rain water harvesting* | 1 |
| | *Beyond the fence initiatives* | 1 |
| **Credit 4.3** | ***Renewable Energy*** | **4** |
| | *On-site renewable energy generation (Both electrical & thermal)* | |
| | ≥2.5% ≤ 5% substitution | 2 |
| | *> 5% substitution* | 4 |
| ***Sub Total*** | | **10** |
| **5** | **Waste Management** | |
| **Mandatory Requirement*** | *Solid, Liquid and Gaseous Waste: Compliance to local regulations* | |
| **Credit 5.1** | *Waste Utilization & 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 |
| | ***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 |
| ***Sub Total*** | | **5** |
| **6** | **Life Cycle Assessment** | |
| | *Life Cycle Analysis – Implementation of LCA* | |
| | *Measures taken & Quantification of benefits achieved* | |
| ***Sub Total*** | | **5** |
| **7** | **Product Stewardship** | |
| **Credit 7.1** | *Education* | 2 |
| **Credit 7.2** | *Quality Management System* | 3 |
| **Credit 7.3** | *Extended Producer Responsibility – Packaging, End of Life Disposal, Product take-back program* | 5 |
| ***Sub Total*** | | **10** |
| **8** | **Innovation** | |
| **Credit 8.1** | *Innovations* | 4 |
| **Credit 8.2** | *Other Credentials, Awards and Accolades* | 1 |
| ***Sub Total*** | | 5 |

## Mandatory Requirement - 1

For a product to be taken up for GreenPro Certification, the manufacturer shall comply with the applicable Acts & Rules related to Environment, Health & Safety. This may be demonstrated, for example, by providing copies of:

(a) Valid Consent to Operate under the Water (Prevention & Control of Pollution) Act & Air (Prevention & Control of Pollution) Act

(b) Valid Authorization under the Hazardous Waste (Management, Handling & Trans -boundary Movement) Rules

(c) Factory license under the Factories Act

# 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 the design stage
    - At the manufacturing stage

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

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

**Documentation Required**

- Eco Vision statement
- Strategies adopted at the design & the manufacturing stage to achieve eco vision
  For Eg:
    a. Resource allocation for improving the design of the product & manufacturing of the product
    b. Employees and stakeholders engaged
- Details of measures implemented at the design stage and the manufacturing stage of the product with quantification of benefits

# Mandatory Requirement – 2

**Intent**
Enhance the performance of the product at component level to ensure safety and durability.

**Requirements**
The lighting system shall comply to the safety, durability and other performance requirements of individual components as per the standards specified below.

- For LED Chip:
  a) Testing as per IESNA LM 80 for useful life of LED chip
- For LED Driver:
  a) Performance requirements to meet IS 16104:2012,
  b) Safety requirements to meet – IS 15885.2.2013 or IEC 61347 – 2 - 1
- For Luminaire:
  a) Comply with General Safety Standards as per IS 10322 or IEC 60598-1
  b) Performance testing as per IESNA LM 79
- Luminaire photometric files to be submitted in IESNA, CIBSE or EULUMDAT file format

**Documentation Required**
Test reports of all the specified parameters of individual components of lighting system.

# 2.0 Product Performance

## Credit 2.1: Energy Efficiency — Points: 30

**Intent**
Design and develop energy efficient lighting systems to reduce energy demand in built environment.

**Award of points**
Test the luminaire efficacy as per IESNA LM79 standard and produce the test reports

| Credits | Product Performance | Credit Points |
|---|---|---|
| **Credit 2.1** | **Luminaire Efficacy based on IESNA LM79 testing** | |
| | Efficacy ≥ 90 | *10* |
| | Efficacy ≥ 105 | *20* |
| | Efficacy ≥ 120 | *30* |

**Exemplary Performance**
Additional Credits as part of 'Innovation' for exceeding the product performance criteria by more than 20 %

**Documentation Required**
Test reports as per the specified testing standard.

## Credit 2.2: Photobiological Safety — Points: 5

**Intent**
Design and develop a photobiologically safe lighting system to enhance health and wellbeing of the users

**Award of points**
Test the luminaire as per IEC 62471 and meet safe exposure limits for assessing UV Hazards for Skin & Eye.

| Credit 2.2 | Photobiological Safety of Lighting System | |
|---|---|---|
| | Actinic UV < 0.001 W/m² | 5 |
| | Near UV < 10 W/m² | |
| | Blue Light < 100 (10000 s) W/m²*sr | |
| | Retinal Thermal < 28000/α (345679) W/m²sr | |
| | IR Radiation, eye < 100 W/m² | |

**Exemplary Performance**
Additional Credits as part of 'Innovation' are not applicable for the above credit

**Documentation Required**
Test reports as per the specified testing standard.

## Credit 2.3: Comfort **Points: 5**

**Intent**

Design and develop lighting system to enhance the visual comfort and thereby reducing associated health hazards for the users.

**Award of points**

- Test the color rendering index of luminaires as per IESNA LM79 and produce test reports.
- Carry out lighting simulation and demonstrate that the Unified Glare Rating is well within the specified limits.

| **Credit 2.3** | **Product Performance – Comfort, Health & Wellbeing** | |
|---|---|---|
| | Color Rendering Index, Ra ≥ 85 | 5 |
| | UGR – Unified Glare Rating testing using lighting simulation in validated lighting simulation tools | |
| | UGR ≤ 19 | 5 |

**Exemplary Performance**

Additional credits as part of 'Innovation' are applicable for the above credit if any of the above parameters covered in *Credit 2.3* exceed the minimum requirement by more than 20 %.

**Documentation Required**

- Test reports as per the specified testing standard.
- Simulation report on Unified Glare Rating analysis.

## Credit 3: Raw Materials **Points: 10**

## Elimination of Hazardous Substances

**Intent**

Eliminate exposure to prohibited substances that can lead to long term health effects either through respiration / direct contact.

**Award of Points**

- Test the lighting system and demonstrate that the hazardous substances such as Mercury, Lead, Cadmium, Chromium (VI) and their compounds are less than 0.1 % by weight in the final product
- All the component suppliers of lighting system to meet requirements of ISO 14001 Environment Management System

| **3** | **Raw Material** | |
|---|---|---|
| **Credit 3.1** | ***Raw Material Requirements*** | |
| | Elimination of Hazardous Substances | 10 |
| | Component suppliers to meet ISO 14001 – Environment Management System requirements | 5 |
| *Sub Total* | | **15** |

**Exemplary Performance**

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

**Documentation Required**

- Test report for presence of hazardous substances
- Details of component suppliers and their compliance to ISO 14001

-

# 4.0 Manufacturing Process

## Credit 4.1: Energy Efficiency — Points: 3

**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 |
|---|---|---|
| **4** | **Manufacturing Process** | |
| **Credit 4.1** | ***Energy Efficiency (improvement in the last 3 years)*** | **3** |
| | *Reduction in specific energy consumption ≥ 5%* | 1 |
| | *Reduction in specific energy consumption ≥ 10%* | 2 |
| | *Reduction in specific energy consumption ≥ 15%* | 3 |

**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: 3

**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 (improvement in the last 3 years)*** | |
| | *Reduction in specific water consumption ≥ 5%* | 1 |
| | *Reduction in specific water consumption ≥ 10%* | 2 |
| | *Rain water Harvesting - Harvest rainwater run-off from Roof & Non-Roof areas* | 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 Energy **Points: 4**

**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 | 2 |
| | *> 5% substitution* | 4 |

A company is eligible for claiming the allotted points to the threshold level of 4 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**

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

## 5.0 Waste Management **Points: 5**

**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 / incineration.

| Credits | *Criteria* | Credit Points |
|---|---|---|
| | **Waste Management** | |
| **Credit 5.1** | *Waste Utilization & Disposal (in the last 3 years)* | |
| | ***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 |
| | ***Hazardous Waste*** | |
| | *> 5%reduction in waste going to landfill/incineration* | 1 |
| | *> 10%reduction in waste going to landfill/ incineration* | 2 |
| | *> 15%reduction in waste going to landfill/ incineration* | 3 |

**Exemplary Performance**

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

**Documentation Required**

Details of the following for the preceding 3 years:

- Details of waste Generated and their quantity by weight or volume
- Details of Utilization of the wastes and the process of utilization
- 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 Assessment — Points: 5

**Intent**

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

**Award of points**

- The product manufacturer to carry out life cycle analysis with the support of an external service provider or with internal expertise using a validated LCA 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 Assessment* | 5 |
| | *Measures taken & Quantification of benefits achieved* | |

**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**

- LCA study report with the details of the study conducted

# 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
2. Quality management system for minimizing the rejection rate after product dispatch
3. Extended producer responsibility increasing the recycling or safer disposal and also to encourage the manufacturer in adopting 'Green Packaging'.

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

## Credit 7.1: Education **Points: 2**

**Intent**

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

**Award of points**

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 dispatch and users* | 1 |
| | *> 20% of people involved in handling the product after dispatch and users* | 2 |

**Exemplary Performance**

This credit is not eligible for exemplary performance under innovation criteria

**Documentation Required**

- Material Safety Data Sheet to be provided for the 'Lighting System'
- Instructions related to installation and maintenance to be provided
- Details of the stake holder's specific awareness or information dissemination programmes about the Green Products, its features and their roles to reap the intended benefits
- Estimation of % of stake holders covered

## Credit 7.2: Quality Management Points: 3

**Intent**

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

**Award of points**

- 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** | *Quality maintenance & Minimization of Rejection Rate* | 3 |
| | *4% reduction in rejection rate during dispatch & storage* | 1 |
| | *6% reduction in rejection rate during dispatch & storage* | 2 |
| | *8% reduction in rejection rate during dispatch & storage* | 3 |

**Exemplary Performance**

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

**Documentation Required**

- Details of the quality management system to bring down the rejection rate after the dispatch of the products
- Meet requirements of ISO 9001: Quality Management System
- Details of the quantify of product dispatched and the rejection rate

## 7.3 Extended Producer Responsibility Points: 5

**Intent**

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

**Award of points**

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
- Avoid blistered packaging
- PVC not to be used as part of packing
- Program to Reduce the mass of packaging
- Product take back program

The company 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 – Green Packaging, End of Life Disposal, Product take back* | 5 |

**Exemplary Performance**

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

**Documentation Required**

- Details of green packaging and the measures in place for reducing packaging mass
- Details of 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.

**Award of points**
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
- 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 |

**Documentation Required**

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