

**BLUE ANGEL**

**The German Ecolabel**



**Climate-Friendly Grocery Stores in the Food  
Retail Sector**

**DE-UZ 179**

**Basic Award Criteria**

**Edition March 2013**

**Version 5**

## The Environmental Label is supported by the following four institutions:



Federal Ministry  
for the Environment, Nature Conservation  
and Nuclear Safety

The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety is the owner of the label. It regularly provides information on the decisions taken by the Environmental Label Jury.



The German Environmental Agency with its specialist department for "Ecodesign, Eco-Labeling and Environmentally friendly Procurement" acts as office of the Environmental Label Jury and develops the technical criteria of the Basic Criteria for Award of the Blue Angel.



The Environmental Label Jury is the independent, decision-making body for the Blue Angel and includes representatives from environmental and consumer associations, trade unions, industry, the trade, crafts, local authorities, academia, the media, churches, young people and the German federal states.



The RAL gGmbH is the awarding body for the Environmental Label. It organises the process for developing the relevant award criteria in independent expert hearings – which involve all relevant interest groups.

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**This document is a translation of a German original. In case of dispute, the original document should be taken as authoritative.**

# **1 Introduction**

## **1.1 Preface**

In cooperation with the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, the German Environmental Agency and considering the results of the expert hearings conducted by RAL gGmbH, the Environmental Label Jury has set up these Basic Criteria for the Award of the Environmental Label. RAL gGmbH has been tasked with awarding the Environmental Label.

Upon application to RAL gGmbH and on the basis of a Contract on the Use of the Environmental Label to be concluded with RAL gGmbH, the permission to use the Environmental Label may be granted to all products, provided that they comply with the requirements as specified hereinafter.

The product must comply with all the legal requirements in the country in which it is to be marketed. The applicant shall declare that the product meets this requirement.

## **1.2 Background**

The food retail sector is responsible for approx. 1% of the greenhouse gas emissions in Germany and for around 3% of the total energy consumption in Germany. The refrigeration systems for cooling food account for the largest proportion of the total energy consumption at almost 40 %, as well as for the largest share of the indirect greenhouse gas emissions from grocery stores in the food retail sector. Around 30 % of the total energy consumption is used for heating, around 20 % for lighting and 8 % for air conditioning. The operation of office equipment and small electrical appliances is responsible for around 6 % of the total energy consumption<sup>1</sup>. In all of these areas, there is significant potential for making savings in terms of energy consumption and thus reducing the greenhouse emissions.

In addition, refrigeration systems can contain halogenated organic compounds with high ozone depletion potential and global-warming potential as refrigerants and in their insulation materials. The proportion of direct emissions due to refrigerant losses in refrigeration equipment in the German food retail sector accounts for over 30 % of the total emissions<sup>2</sup> in this sector.

As a result of the use of natural refrigerants that have no ozone depletion potential and no or little global-warming potential in combination with the energy-efficient operation of the refrigeration systems, a significant proportion of the greenhouse gas emissions caused by refrigeration systems in the food retail sector can be saved. Other emissions savings are possible through good thermal insulation in the building, energy-efficient lighting, ventilation and the use of more energy-efficient electrical equipment.

## **1.3 Objective of the environmental label**

Awarding the environmental label for climate-friendly grocery stores in the food retail sector should significantly reduce the energy and refrigerant-related emissions into the environment

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<sup>1</sup> IFEU, Fraunhofer ISI, Prognosis, GWS et al.: Final Report, Energy Efficiency: Potential economic effects and innovative spheres of action and funding for national climate-protection initiatives, Study commissioned by the Federal Ministry for the Environment, Nature Conservation and Reactor Safety, Funding code 03KSW016A and B, Heidelberg, Karlsruhe, Berlin, Osnabrück, Freiburg 2011.

<sup>2</sup> J.-M. Rhiemeier, J. Harnisch et al: Climate Change 12/08, Comparative Assessment of the Climate Relevance of Supermarket Refrigeration Systems and Equipment, a study commissioned by the Federal Environment Agency, Funding code 206 44 300, Dessau-Roßlau 2008.

by these retail stores. In order to achieve this objective, particularly high standards have been set for the measures designed to reduce greenhouse gas emissions.

Paragraph 3 "Requirements and compliance verifications" of these Basic Award Criteria has been subdivided into 12 mandatory requirements (M) and 12 optional requirements (O). The most important requirements (M) from an environmental viewpoint must be strictly observed. In addition, the following number of optional requirements must be fulfilled depending on the age and ownership status of the building and these can be freely selected by the applicant from the list of 12 additional optional (O) improvements:

| Type of building  | Number |
|---|--------|
| Existing building rented by the operator                                      | 3      |
| Newly constructed building or renovated building stock rented by the operator | 4      |
| Existing building owned by the operator                                       | 5      |
| Newly constructed building or renovated building stock owned by the operator  | 6      |

This flexible approach was selected to enable requirements to be set for both new and existing grocery stores in the food retail sector, as well as for rental property and buildings owned by the operator and also to cover all of the various forms of grocery store found in the sector. This approach enables operators of grocery stores in the food retail sector to become engaged in an environmental sense based on their own particular circumstances.

Therefore, following benefits for the environment and health are stated in the explanatory box:



## 1.4 Definitions

The following definitions are valid for these Basic Award Criteria:

- **Grocery stores in the food retail sector:** All store formats found in the retail trade whose product range consists primarily of food (self-service food stores and markets, food discounters, supermarkets, convenience stores, self-service warehouses, hypermarkets). The grocery stores must generate at least 50% of their turnover through the sale of food.
- **Existing buildings:** Already existing buildings before 01.01.2013.
- **Renovated building stock:** Already existing buildings before 01.01.2013 that were subjected to an energy-efficient renovation after 01.01.2013.
- **Newly constructed buildings:** Newly constructed buildings after 01.01.2013.
- **Old systems:** Already existing refrigeration systems before 01.01.2013.
- **New systems:** Newly setup refrigeration systems or those in the planning stage after 01.01.2013 for which completely new components and systems are installed in their construction.

- **Heat recovery:** Utilisation of the waste heat generated during the operation of refrigeration equipment through recuperative systems (e.g. heat exchange), regenerative systems (e.g. circuit compound systems, heat pipes), regenerators with heat carriers (e.g. rotating storage masses) and heat pumps.
- **Energy management system (according to DIN EN ISO 50001):** A system of interrelated or interacting elements for the introduction of an energy policy and strategic energy objectives, as well as processes and procedures for achieving these strategic objectives. An energy management system places a company in a position to systematically improve their energy-related performance by creating the required technical and organisational prerequisites and continuously monitoring the achievement of the objectives.
- **Independent expert:** Person authorised to issue Energy Performance Certificates for non-residential buildings according to § 21 EnEV or a person authorised according to German federal state law for compiling or testing compliance verification with the EnEV for non-residential buildings.
- **Sales area of a food retail store:** The area operated by the applicant themselves that is used for the sale of products, is accessible for customers and is not just temporarily used for sales purposes. This includes the floor space taken up by goods shelving or stands (goods), consumer areas, stairwells in sales rooms and other sales and service areas accessible to customers. Areas that do not count as sales areas include physically separate areas such as offices, storage and preparation areas, workshops and those areas designed to be used by personnel<sup>3</sup>. Areas situated behind service counters are to be included.

## 2 Scope

These Basic Award Criteria are valid for grocery stores in the food retail sector.

## 3 Requirements and compliance verifications

The Environmental Label illustrated on the first page may be used for labelling of grocery stores pursuant to Paragraph 2, provided that the following requirements are complied with:

### 3.1 Energy requirement of the building

#### Mandatory requirements (M)

The calculated primary energy requirement of a newly constructed building must be at least 30 % less than the primary energy requirement of the reference building according to the Energy Saving Directive (EnEV) 2009<sup>4</sup>. The calculated primary energy requirement of an existing or renovated building must not exceed the primary energy requirement of the reference building according to Energy Saving Directive (EnEV) 2009.

The Energy Performance Certificate for buildings is an important instrument for creating awareness - also amongst visitors to the retail store - about the energy efficiency of buildings. The Energy Performance Certificate for the building in accordance with §§ 16ff EnEV is to be displayed in a clearly visible position. If the grocery store is only located in part of a building e.g.

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<sup>3</sup> Based on the Committee for Definitions in Trade and Distribution (Ausschuss für Definitionen zu Handel und Distribution): Catalogue E, 5th Edition, Cologne, 2006.

<sup>4</sup> Energy Saving Directive – EnEV 2009: Directive on energy-saving thermal insulation and energy-saving installations in buildings.

in a shopping centre, the requirement is considered to have been fulfilled if the energy performance certificate is displayed in a clearly visible position in the building.

### **Optional requirements (O)**

The calculated primary energy requirement of a newly constructed building should be at least 50 % less than the primary energy requirement of the reference building according to the Energy Saving Directive (EnEV) 2009. The calculated primary energy requirement of an existing or renovated building should be at least 30 % less than the primary energy requirement of the reference building according to EnEV 2009.

### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 to the Contract and submit an Energy Performance Certificate for non-residential buildings in accordance with §§ 16 ff of the Energy Saving Directive (EnEV) from an independent expert or the calculation of the primary energy requirement according to the EnEV carried out by an independent expert (Annex 2) when making the application. The calculation of the primary energy requirement can be carried out in accordance with the valid version of the EnEV at the time of application.*

## **3.2 Management system**

### **Mandatory requirements (M)**

Energy management systems make it easier to continuously and systematically reduce the energy consumption of businesses, buildings and systems using technical and organisational measures. An energy management system in accordance with DIN EN ISO 50001 must be operated in the food retail store including the refrigeration systems. The VDMA Standards Sheet 24247-7<sup>5</sup> can provide technical advice on the operation of the energy management system. The requirement is considered to have been fulfilled when a holistic energy management system is operated in at least all of those grocery stores operated by the applicant that are to be issued with the Blue Angel ecolabel.

### **Optional requirements (O)**

Environmental management systems are designed to ensure that the environmental performance of a company is continuously optimised through organisational measures. An important prerequisite here is a commitment to constantly improve and avoid environmental impacts. In order to ensure that other environmental impacts are included in the management system alongside energy consumption, the food retail store should operate an environmental management system in accordance with EMAS<sup>6</sup>. The requirement is considered to have been fulfilled when a holistic environmental management system is in place for at least all of those grocery stores operated by the applicant that are to be issued with the Blue Angel ecolabel.

### **Compliance Verification**

*The applicant shall submit the valid certification of the management system, which covers at least the food retail store in the Blue Angel application, that is issued by an environmental auditor or an environmental auditing organisation listed by the German Association for Accreditation and*

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<sup>5</sup> VDMA Standards Sheet 24247-7 Energy efficiency of refrigeration systems, Part 7: Regulation, energy management and efficient operation.

<sup>6</sup> EMAS: Eco-Management and Audit Scheme.

*Recognition of Environmental Auditors (Deutschen Akkreditierungs- und Zulassungsgesellschaft für Umweltgutachter mbH - DAU), Bonn, or an accredited certifier according to the German Accreditation Body (Deutschen Akkreditierungsstelle) (certification according to DIN EN ISO 50001: Annex 3, EMAS registration certificate: Annex 4). A registration certificate according to EMAS is recognised as verification of the energy management system.*

### **3.3 Electricity procurement**

#### **Mandatory requirements (M)**

The electricity used for operating the food retail store must be sourced from a green electricity product with proven additionality. Additionality comprises, for example, the additional construction of new plants for electricity production from renewable energy, the operation of particularly environmentally-friendly plants and the setting of efficiency requirements for these plants.

#### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 and submit a power supply contract for certified green electricity with additionality (Annex 5) when making the application.*

### **3.4 Energy efficiency of the refrigeration system**

The energy efficiency of the refrigeration system including all of the refrigeration technology used in the installations must be higher than the average standard from all food retail stores operated in 2009. The key energy efficiency indicator "Energy requirement / (display area x year)" from the VDMA Standards Sheet 24247-4<sup>7</sup> is to be used for the comparison with existing systems from 2009. The average standard from all existing systems in 2009 (base line)<sup>8</sup> acts as the reference value.

#### **Mandatory requirements (M)**

Old systems must achieve a key energy efficiency indicator that is at least 15 % less than the average standard from all existing systems in 2009 (base line) at the time of the application.

New systems must achieve a key energy efficiency indicator that is at least 35 % less than the average standard from all existing systems in 2009 (base line) at the time of the application. Because no standardised method currently exists for calculating the energy requirements of a planned refrigeration system, verification is to be submitted after measuring the energy consumption following one year of operation.

#### **Optional requirements (O)**

Old systems should achieve a key energy efficiency indicator that is at least 25 % less than the average standard from all existing systems in 2009 (base line) at the time of the application.

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<sup>7</sup> VDMA Standards Sheet 24247-4 Energy efficiency of refrigeration systems, Part 4: Supermarket refrigerating, commercial refrigeration, refrigerated cabinets.

<sup>8</sup> A definition of the base line can be found on the homepage for the quick efficiency check at <http://www.vdma-effizienz-quickcheck.org/>.



New systems should achieve a key energy efficiency indicator that is at least 45 % less than the average standard from all existing systems in 2009 (base line) at the time of the application.

### **Compliance Verification**

*In the case of old systems, the data required and used for the calculation of the key energy efficiency indicator and completing the so-called "quick efficiency test" (<http://www.vdma-effizienz-quickcheck.org/>) (Annex 6) and the results of the completed quick efficiency check (Annex 7) shall be submitted when making the application.*

*In the case of new systems, the values measured one year after the refrigeration system is commissioned and used for the completion of the so-called "quick efficiency test" (<http://www.vdma-effizienz-quickcheck.org/>) (Annex 6) and the results of the completed quick efficiency check (Annex 7) shall be submitted when making the application. If the required key energy efficiency indicator level is not achieved, the Contract on the use of the Environmental Label and thus the permission to use the Environmental Label will expire.*

## **3.5 Heat recovery**

### **Mandatory requirements (M)**

It is sensible for the waste heat generated by the compound refrigeration system to be utilised for heating process water and/or the building. Normally, the waste heat at the condenser does not occur at a usable temperature level. The refrigeration system therefore increases the condensation temperature, which in turn increases the energy consumption of the system. There are currently no easy-to-use methods for measuring the share of the energy consumption in the food retail market accounted for by the utilised waste heat. The increased electricity consumption is already covered in the energy efficiency of the refrigeration system in accordance with Paragraph 3.4.

The following requirements are valid:

- An installation for utilising the waste heat generated by the refrigeration system is to be fitted.
- The heat transfer capacity of the installation fitted for utilising the waste heat generated by the refrigeration system is to be at least 75% of the heating load (kW) of the building according to EnEV.

### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 and submit the following when making the application:*

- *Product documentation for the heat recovery installation, including information on the heat transfer capacity for utilising the waste heat (Annex 8).*
- *Verification of the heating load (kW) of the building according to EnEV (Annex 9) (see also Chapter 3.1).*

*Alternatively, the following measured values may serve as a verification of the heating load, each measured over a period of 12 months and to be submitted within one year from the commissioning of the system:*

- *the amount of waste heat transferred to the heating system or the energy consumption of the additional boiler (Annex 8) and*

- *heat consumption for space heating and wastewater (Annex 9)*

### **3.6 Refrigeration cabinet covers**

#### **Mandatory requirements (M)**

Equipment and refrigeration cabinets used for deep freezing food must be fitted with glass covers or glass doors.

All normal refrigeration points (including service counters) without permanent covers must be fitted with covers at night.

#### **Optional requirements (O)**

Equipment and refrigeration cabinets used for the normal refrigeration of food should be fitted with glass covers or glass doors.

These requirements are not valid in the case of service counters where the personal from the food retail store must have permanent access during the store's opening hours.

#### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 and submit the product documentation for the refrigeration equipment and refrigeration cabinets used (Annex 10) when making the application.*

### **3.7 Refrigerant**

#### **Mandatory requirements (M)**

The refrigeration systems and the connected refrigeration equipment and refrigeration cabinets in the food retail store must exclusively use natural refrigerants.

A maximum of 5 % of the plug-in refrigeration equipment and refrigeration cabinets not connected to the compound refrigeration system may contain fluorine refrigerants.

#### **Optional requirements (O)**

In addition to the compound refrigeration system, all other systems and equipment that use refrigerants (air-conditioning systems, heat pumps, cold storage containers and rooms and plug-in refrigeration equipment and refrigeration cabinets) should exclusively use natural refrigerants.

#### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 and submit the product documentation for the refrigeration systems, refrigeration equipment and refrigeration cabinets (Annex 11) and, if relevant, the product documentation for all systems and equipment that use refrigerants (Annex 12).*

### **3.8 Foaming agents**

#### **Mandatory requirements (M)**

In the compound refrigeration system and in all systems and equipment containing refrigerant, no halogenated organic compounds may be used as foaming agents or in the manufacture of the installed insulating materials.

### **Optional requirements (O)**

In the food retail store building, no halogenated organic compounds should be used as foaming agents or in the manufacture of the installed insulating materials.

#### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 and submit the relevant product documentation for the refrigeration and air-conditioning technology (Annex 13) and for the optional requirements also submit documentation for the building products used (Annex 14).*

### **3.9 Interior lighting in the store**

The lighting concept in a climate-friendly grocery store in the food retail sector must display the lowest possible power consumption.

#### **Mandatory requirements (M)**

The maximum electrical power consumption for the interior lighting of the sales area in the store, measured in watts per square meter of sales area [ $\text{W}/\text{m}^2$ ], may not exceed a value of  $15 \text{ W}/\text{m}^2$ . The electrical power consumption for the interior lighting of the store encompasses here all of the power required for operating the lighting system including the controls, regulation, ballasts and bulbs.

Outside of the store's hours of operation, at least 90 % of the interior lighting in the store must be switched off.

#### **Optional requirements (O)**

The maximum electrical power consumption for the interior lighting of the sales area in the store, measured in watts per square meter of sales area [ $\text{W}/\text{m}^2$ ], should not exceed a value of  $12 \text{ W}/\text{m}^2$ .

#### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 and submit verification of the calculated power consumption for the interior lighting in the store (Annex 15) when making the application. In the case of newly installed lighting systems, the verification is to be provided after one year's operation in the form of a measurement of the power consumption.*

### **3.10 Use of daylight**

#### **Optional requirements (O)**

Daylight should account for at least 20 % of the total amount of light required per year in mega lumen hours for the interior lighting in the store.

In order to control the use of artificial light, daylight-dependent brightness sensors are to be installed.

#### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 and submit the calculation for the proportion of the lighting accounted for by daylight (Annex 16) and the product documentation for the installed brightness sensors (Annex 17) when making the application.*

### **3.11 Lighting concept**

#### **Optional requirements (O)**

In the event of the renovation of existing building stock and in the planning and construction of new buildings, a lighting concept for the interior lighting of the store that is optimised according to energy and lighting technology criteria should be created and observed. It should provide information on the type and quantity of the fitted lamps, the electrical power consumption [watts], luminous flux [lumen] and illuminance level [Lux].

#### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 and submit the lighting concept (Annex 18) when making the application.*

### **3.12 Photovoltaic systems**

#### **Optional requirements (O)**

A photovoltaic system is to be installed on the premises of the grocery store to generate electricity from the sun's energy. The photovoltaic modules should be installed over an area that corresponds to at least 40 % of the roof area of the grocery store.

#### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 and submit documentation on the installed photovoltaic system (Annex 19) and the size of the roof area (Annex 20) when making the application.*

### **3.13 Location/accessibility of the food retail store**

#### **Mandatory requirements (M)**

In grocery stores with a sales area up to 1000 square meters, there must be at least 10 bicycle stands and in grocery stores with a sales area over 1000 square meters at least 20 bicycle stands in the immediate vicinity at a maximum distance of 20 metres from the entrance/exit to the building in which the food retail store is located.

#### **Optional requirements (O)**

The food retail store should be accessible using public transport. The nearest stop on the local public transport network should not be further than 1000 metres away from the entrance/exit to the store.

#### **Compliance Verification**

*The applicant shall declare compliance with the requirements in Annex 1 when making the application.*

### **3.14 Recycled paper for printed advertising material**

#### **Mandatory requirements (M)**

Printed advertising brochures issued by the food retail store must only be printed on recycled paper that is certified with the Blue Angel ecolabel DE-UZ 14.

### **Compliance Verification**

The applicant shall declare compliance with the requirements in Annex 1 and submit the relevant documentation about the type of certified paper used and the quantity of paper used (Annex 21) when making the application.

### **3.15 Sustainable building**

The renovation of existing building stock and the planning and construction of new buildings must be carried out in accordance with the guidelines for sustainable building issued by the Federal Ministry of Transport, Building and Urban Development (BMVBS)<sup>9</sup>. The criteria published by the German Association of Sustainable Building (DGNB)<sup>10</sup> should be taken into account in this area. This includes, amongst other things, documentation of the building products used including the environmental labelling e.g. Blue Angel or Environmental Product Declaration (EPD)<sup>11</sup> where available.

#### **Mandatory requirements (M)**

In the case of newly constructed buildings or renovated building stock owned by the operator, the above-named requirement must be fulfilled.

#### **Optional requirements (O)**

In the case of newly constructed buildings or renovated building stock rented by the operator, the above-named requirement should be fulfilled.

### **Compliance Verification**

The applicant shall declare compliance with the requirements in Annex 1 and submit the building plans in accordance with the guidelines for sustainable building from the BMVBS including documentation of the building products used or a certificate from the DGNB of at least silver level. Comparable certificates from other certifying bodies (e.g. LEED) can be accepted (buildings owned by operators Annex 22, rented buildings Annex 23).

### **3.16 Tabular overview of the requirements**

| <b>Mandatory requirements</b>  |   |
|--|---|
| Energy requirement of the building   | Posting the energy performance certificate  |
| <ul style="list-style-type: none"><li>Existing buildings</li><li>Newly constructed buildings</li></ul> | Primary energy requirement: <ul style="list-style-type: none"><li>corresponds at least to the reference building according to EnEV</li><li>at least 30 % less than the reference building according to EnEV</li></ul> |

<sup>9</sup> Guidelines for sustainable building at:

<http://www.nachhaltigesbauen.de/leitfaeden-und-arbeitshilfen/leitfaden-nachhaltiges-bauen.html>

<sup>10</sup> German Association of Sustainable Building (DGNB) at:

<http://www.dgnb.de/de/zertifizierung/index.php>

<sup>11</sup> Information from the Institute Construction and Environment e.V. at:

<http://bau-umwelt.de/hp354/Deklarationen.htm>

| <b>Mandatory requirements</b>   |  |
|---|--|
| Energy management system<br>(according to DIN EN ISO 50001)   | Operation  |
| Electricity procurement   | Green electricity product with proven additionality  |
| Energy efficiency of refrigeration systems <ul style="list-style-type: none"> <li>• Old system</li> <li>• New system</li> </ul>   | Key energy efficiency indicator at least: <ul style="list-style-type: none"> <li>• 15 % less than existing systems</li> <li>• 35 % less than existing systems</li> </ul>           |
| Heat recovery   | Installation for heat recovery fitted<br>Heat transfer capacity of the installation for utilising the waste heat is at least 75% of the heating load                               |
| Refrigeration cabinet covers  | Permanent covering for deep freeze cabinets<br>Night covering for normal refrigeration without permanent covering  |
| Refrigerant   | Exclusively natural refrigerants in the compound refrigeration system<br>Max. 5 % of the plug-in refrigeration equipment and refrigeration cabinets with fluorine refrigerants     |
| Foaming agents  | No halogenated organic compounds in the refrigeration system or any other systems and equipment containing refrigerant   |
| Interior lighting in the store  | Max. electrical power consumption $\leq 15 \text{ W/m}^2$<br>At least 90 % of the interior lighting in the store switched off outside the operating times                          |
| Location and accessibility <ul style="list-style-type: none"> <li>• Sales area <math>\leq 1000 \text{ m}^2</math></li> <li>• Sales area <math>&gt; 1000 \text{ m}^2</math></li> </ul> | <ul style="list-style-type: none"> <li>• At least 10 bicycle stands within a max. distance of 20 m</li> <li>• At least 20 bicycle stands within a max. distance of 20 m</li> </ul> |
| Recycled paper for printed advertising material   | Printed advertising brochures on recycled paper certified with the Blue Angel ecolabel   |
| Sustainable building  | Renovation or construction of own buildings based on the guidelines for sustainable building or DGNB criteria  |

| <b>Optional requirements</b>   |  |
|--|--|
| Energy requirement of the building <ul style="list-style-type: none"> <li>• Existing buildings</li> <li>• Newly constructed buildings</li> </ul> | Primary energy requirement: <ul style="list-style-type: none"> <li>• at least 30 % less than the reference building according to EnEV</li> <li>• at least 50 % less than the reference building according to EnEV</li> </ul> |

| <b>Optional requirements</b>  |  |
|---|--|
| Environmental management system according to EMAS   | Operation  |
| Energy efficiency of refrigeration systems <ul style="list-style-type: none"> <li>• Old system</li> <li>• New system</li> </ul> | Key energy efficiency indicator at least: <ul style="list-style-type: none"> <li>• 25 % less than existing systems</li> <li>• 45 % less than existing systems</li> </ul> |
| Refrigeration cabinet covers  | Permanent covering for normal refrigeration cabinets   |
| Refrigerant   | Exclusively natural refrigerants in all systems and equipment containing refrigerant   |
| Foaming agents  | No halogenated organic compounds in the food retail store building   |
| Interior lighting in the store  | Max. electrical power consumption $\leq 12 \text{ W/m}^2$  |
| Use of daylight   | At least 20 % of the total light required<br>Installation of daylight-dependent brightness sensors   |
| Lighting concept  | Creation and observance in newly constructed buildings and renovated building stock  |
| Photovoltaic systems  | Installed over an area covering at least 40 % of the roof area of the grocery store  |
| Location and accessibility  | Max. 1000 metres by foot from the nearest stop on the local public transport network   |
| Sustainable building  | Renovation or construction of rental buildings based on the guidelines for sustainable building or DGNB criteria   |

In terms of the optional requirements (O), the following number of optional requirements must be fulfilled depending on the age and ownership status of the building and these can be freely selected by the applicant:

| <b>Type of building</b>   | <b>Number</b> |
|---|---------------|
| Existing building rented by the operator                                      | 3             |
| Newly constructed building or renovated building stock rented by the operator | 4             |
| Existing building owned by the operator                                       | 5             |
| Newly constructed building or renovated building stock owned by the operator  | 6             |

#### **4 Applicants and Parties Involved**

Owners or operators of food retail stores according to Paragraph 2 shall be eligible for application.

Parties involved in the award process are:

- RAL gGmbH to award the Blue Angel Environmental Label,
- the federal state being home to the applicant's production site,

- Umweltbundesamt (German Environmental Agency) which after the signing of the contract receives all data and documents submitted in applications for the Blue Angel in order to be able to further develop the Basic Award Criteria.

## **5 Use of the Environmental Label**

The use of the Environmental Label by the applicant is governed by a contract on the use of the Environmental Label concluded with RAL gGmbH.

Within the scope of such contract, the applicant undertakes to comply with the requirements under Paragraph 3 while using the Environmental Label.

Contracts on the Use of the Environmental Label are concluded to fix the terms for the certification of products under Paragraph 2. Such contracts shall run until December 31, 2025. They shall be extended by periods of one year each, unless terminated in writing by March 31, 2025 or March 31 of the respective year of extension.

After the expiry of the contract, the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect products being still in the market.

The applicant (manufacturer) shall be entitled to apply to RAL gGmbH for an extension of the right to use the ecolabel on the product entitled to the label if it is to be marketed under another brand/trade name and/or other marketing organisations.

The Contract on the Use of the Environmental Label shall specify:

- Applicant (manufacturer/distributor)
- Brand/trade name, product description
- Distributor (label user), i.e. the above-mentioned marketing organisations.

Grocery stores in the food retail sector that are awarded with the Blue Angel ecolabel must ensure in all of their advertising measures using the environmental label that the end customer is not given the misleading impression that the grocery store and all of the products offered for sale within it carry the environmental label.

This can be implemented, for example, by displaying the certificate awarded by RAL gGmbH in the entrance area of the store including an additional explanation of the important reasons for the award of the Blue Angel environmental label.