



Rule Book & Subscription Form: Lean & Green Luxembourg

Lean & Green Applicant:

Date:



Table of content

1 Lean & Green Initiative – General Information	3
2 The Lean & Green Program	3
2.1 Target Group of the Lean & Green Program	3 4
2.4 Receiving the 1 st Lean & Green Star	4 5
Why should you join the Lean & Green movement? Terms of participation	
4.1 Participation fee & Terms of payment	7
4.4 Code of practice regarding the Lean & Green Branding	8 8
4.5 Miscellaneous	10
5 Background information on the different Lean & Green levels	10

1 Lean & Green Initiative – General Information

Lean & Green – an initiative to promote efficient and green logistics

The Lean & Green program is an international, cross-sectoral initiative launched in 2009 by a Dutch non-profit network called *Connekt* to promote the sustainable development of the logistics and transportation sector. The core aim of the Lean & Green initiative is to support participants to reduce their CO2e emissions in logistics and transport over five phases whereby participants can aim at reaching the Paris COP21 climate goals.

While today the Lean & Green movement is active on a European level, national Lean & Green programs are organized by national hosts. In this context, since 2014, the Cluster for Logistics Luxembourg, in collaboration with the Ministry of Mobility and Public Works (MMTP), exclusively promotes and organizes the national Lean & Green program in Luxembourg. Over the past 6 years, the Cluster for Logistics has succeeded in supporting 13 companies in their sustainability efforts within the Lean & Green initiative. By taking a closer look at their logistics activities and rethinking their current business processes, the companies participating at the program are able to identify potential for savings and optimization, and thus to make the best use of their resources by saving costs (Lean) and reducing CO2 emissions (Green).

The independent auditing partner *DART Consulting* (or another pre-approved audit entity) will be responsible for the analysis, evaluation and certification of the action plans developed by the Lean & Green candidate. This team, competent in the field of sustainable logistics, will make sure that companies can benefit from a neutral process and their expertise will guarantee the value of the label.

2 The Lean & Green Program

2.1 Target Group of the Lean & Green Program

The Lean & Green initiatives aims at a wide range of companies involved in transport and logistics activities in Luxembourg, which ranges from logistics providers over infrastructure managers to shippers. After registration within the program, the registered entity becomes a participant.

2.2 The Action Plan

A participant begins by submitting its carbon footprint for the reference year, which includes the participant's current greenhouse gas emissions for their logistics and warehousing activities. A participant that has already calculated its carbon footprint and

introduced logistics-related measures to reduce its greenhouse gas emissions can backdate the reference year (base/reference measurement) by a maximum of 3 years (see fig 2). Based on this information, the participant puts together a realistic and feasible action plan for CO2e reduction which must conform to specific Lean & Green criteria. The program can be part of a company's annual sustainability report.

2.3 Receiving the Lean & Green Award

Once the action plan has been approved, the participant will receive the Lean & Green Award. This gives the participant the green light to begin implementing the measures to reduce emissions and to use Lean & Green logos and marketing material for external communication. By committing to the program, participants actively engage themselves for 5 to 7 months between the kick-off meeting and the delivery of the Lean and Green Award.

2.4 Receiving the 1st Lean & Green Star

After a Lean & Green Award has been received, the participant is responsible for achieving its agreed reduction target of at least 20% within a maximum of 5 years. The achievement of the goals will be reviewed by an external auditing party *DART Consulting*. An audit is conducted for every Lean & Green Star level. Once the participant has successfully passed this audit, it will be awarded the Lean & Green Star.

If a participant fails to reach the 20% reduction target during the first approach, it is allowed to participate in the Lean & Green program with a second approach and a new action plan. This is irrespective of the stage at which it becomes clear that the target reduction is not being met.

2.5 The Lean & Green 5 Star program

The Lean & Green initiative is a continuous program in which participants are challenged to develop their sustainability efforts every 3 years after achieving the first level of the 1st Lean & Green Star. Thus, a five-phase program has been set up to help participants to meet the Paris goals by 2050. This is a 'front runner' program where participants are rewarded upfront for their commitment to CO2e reduction goals. Once the targets in each phase have been achieved, the participant is awarded a Star in recognition of their achievement. Consequently, the program consists of five Star levels, completion of which brings participants to the successful attainment of the Paris climate goals (see Figure 1). The criteria are the same at both the national and the European levels. Although many

participants will wish to enter the program at the First Star level, it is possible to enter the program at a higher Star level and in the middle of a given Star level.

2.6 Data quality requirements



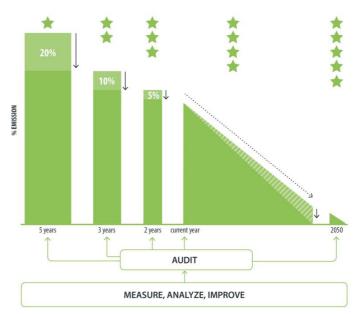


Figure 1 The path to CO2-neutral logistics

Achievement of reduction goals requires a high degree of accuracy in the measurement of a participant's CO_{2e} emissions. Such accuracy is achieved incrementally, and, accordingly, the Five Star program recognises gradually increasing levels of quality as a participant progresses through the phases. Higher data quality means more accurate allocation of the participant's and therefore more accurate insights for the participant. Required data quality levels can be revised annually by the national Lean & Green host.

The 4 grades of data quality are:

- (B) Bronze: default values, estimates or GLEC figures
- (S) Silver: measured, calculated, derived (actual) values, aggregated per period (year or month)
- (G) Gold: measured, calculated, derived (actual) values per license plate/location per period
- (G+) Gold+: measured (actual) values per stop/trip

2.7 Summary of requirements

		base year (x	CO _{2e} goal in	years to		data quality	Minimum Data completeness
1st Star	20%	Year x-3	5	3	50%	Bronze	95%
2nd Star	10%	Year x-2	3	3	65%	Silver	95%
3rd Star	5%	Year x-1	2	3	75%	Silver	95%
4th Star	Absolute reduction	Year x-1	Moving target goal*	N/A	85% (expected, in development)		95%
5th Star	Absolute reduction	Year x-1	2050 at the latest	N/A	90% (expected, in development)		95%

Figure 2 Requirements for the Five Star process

3 Why should you join the Lean & Green movement?

The Lean & Green initiative, that counts over 500 companies in Europe, envisions to induce companies from the logistics and transportations sector to implement a set of self-defined optimization measures in order to reduce their CO2 emissions, all while rethinking business processes and discovering optimisation as well as savings potential along the entire value chain.

By committing to the Lean & Green initiative, companies will reap the following benefits:

1. Secure cost savings

Reduce your costs by implementing the measures laid down in your action plan to reduce your CO2e emissions and optimize your business processes.

2. Comply and prepare for national and European climate laws

As a Lean & Green member, you prepare yourself to comply with the rules and laws stated in the national and European Climate Agreements.

3. Be a pioneer

Set an example: The Lean & Green Award and Star are evidence of your commitment and the attainment of your goals. Mention these sustainability achievements in your customer communication.

4. Benefit from EEO subsidies

Energy suppliers (parties obligées) in Luxembourg offer subsidies of different types (vouchers, financial incentives) for measures implemented within the Lean & Green program that contribute to energy efficiency.

5. Create transparency

Use your own action plan to define your tangible sustainability goals. The reviewer will check your action plan and its implementation, creating transparency and traceability for your customers and partners.

6. Transfer your knowledge

Play an active role in shaping the transfer of knowledge and exchange best practices within the Lean & Green community. Learn from others, share your own experience and work with others in the community to identify further synergies.

4 Terms of participation

In order to participate in the Lean & Green initiative in Luxembourg, a company must sign a binding enrollment document which can be found at the end of this rulebook and which confirms that the company agrees to the rights and obligations mentioned in this rulebook.

4.1 Participation fee & Terms of payment

The costs of participation in the Lean and Green program for members of the Cluster for Logistics are $2.950 \in$, while for non-members of the Cluster for Logistics, the costs of participation are $3.450 \in$. This participation fee is payable for each stage in the Lean & Green program (1st – 5th Star). The invoice for the participation will be sent after the initial commitment and payment of the invoice must occur within 30 days of the date of the invoice.

These costs cover the participation in the Lean & Green program and include the following services:

- Subscription to officially become a Lean & Green member
- Workshop sessions to enter the program and develop an individual action plan
- Auditing of the action plan by pre-selected external auditors
- Lean & Green branding material that can be used for commercial purposes
- Access to the Lean & Green Awards (Award ceremony organized once a year to celebrate the achievements of the Lean & Green participants)

If required, the participant can purchase packages of 4 hours each from DART Consulting for $550 \in$, who will then use their expertise to provide assistance in the program.

4.2 Participant rights and obligations

Each participant must carry out a reference CO2e measurement of its current greenhouse gas emissions. Based on this information, each participant should draw up a realistic and feasible action plan, which – alongside the CO2e calculation – contains specific measures for reducing its greenhouse gas emissions by at least 20%. The action plan is reviewed by the national host or an external auditing party. The participant must supply documentary evidence to the review upon request. A participant may request that the award review be carried out by means of an audit. This is recommended if the participant is unable to supply documentary evidence pertaining to the reference year at the time when the Star review is being carried out. Once a participant successfully passes the review, it receives the Lean & Green Award.

Project progress and the resulting reduction of greenhouse gas emissions must be reported to the national host once a year using a monitoring tool. The data entered into the tool is secure and can only be read by the participant in question and the national host. As soon as the participant has achieved its reduction target, the auditor will carry out an on-site audit of the measures implemented. Once the participant has successfully passed this audit, the national host will award it with the Lean & Green Star certification.

4.3 Confidentiality

All information contained in the action plan (e.g. corporate data, partnerships, etc.) is treated confidentially, due to the fact that some data is sensitive corporate data that is not intended for the public. Only the participants concerned, the national host and the external auditing party (for assessment purposes), have access to the content of the action plan and the monitoring dashboard. Details of emission-reducing measures or examples of calculations are only published or made public following the agreement of the participant.

4.4 Code of practice regarding the Lean & Green Branding

4.4.1 Communication campaigns by the Cluster for Logistics Luxembourg

The Cluster for Logistics Luxembourg has the right to use the names and logos of the participants in its internal and external communications related to the program. Further, information about the achieved emission targets as well as about the reference and evaluation year can be used for any communication campaign. For the public use of other information, the Cluster will require the prior approval of the participants. In any case, confidential information relating to the action plan or business activities of a company will always remain confidential and will not be shared with third parties.

4.4.2 Communication by the Lean & Green participant

If Lean and Green participants communicate about their participation, they have to respect the framework of the concept, related to logistics processes, activities and sustainable resources as well as the energy efficiency target for reducing CO2 emissions. Communication by the candidates must meet the following guidelines for the different phases of the project:

Before obtaining the Lean & Green Award:

After the kick-off meeting, the group of participants can communicate about their participation in the Lean and Green program (e.g. news on the website or in the general

introduction presentations or interviews). The logo, however, cannot be used in any case before the delivery of the Award.

Before obtaining the Lean & Green Star:

The same rules apply between receiving the Lean & Green Award and one of the Lean & Green Stars. Companies can only use the Lean & Green Star logo after they have officially received the permission during the Lean & Green Award ceremony.

Embargo period:

Companies are informed in good time about the grant or refusal of the Award or the Star, depending on the advancement within the program. Upon receipt of this information, an embargo applies during which the companies cannot make this information public but which can nevertheless be used to prepare communication actions. This period extends until the Awards ceremony.

4.4.3 Use of the Lean & Green branding material

The official Lean and Green marketing material for the Lean & Green Award as well as the Lean & Green Stars is standardized and cannot be changed, nor in its content, nor in its color, nor in its dimensions.

The official Lean and Green logo marketing material is protected. Any use without permission may result in legal action.

The official Lean and Green logo marketing material is personal: it is linked to the company name or institution and is not transferable.

Use of Lean & Green Award logo:

The right to use the Lean and Green Award logo is awarded at the ceremony of the Award for a period of 5 years. After successfully passing an audit for the 1st Lean & Green Star, the participant is authorized to use the logo of the Lean & Green 1st Star. If the audit is not passed, the company can prepare a new action plan and if it is approved, it can use the logo of the Lean & Green Award for another 5 years.

Use of Lean & Green Star logo:

After a company has received a Lean & Green Star certificate ($1^{st} - 5^{th}$ Star), it has 3 years to prepare for the next stage, i.e. the 2^{nd} Lean & Green Star. During this time, it may use the logo of the 1st Lean & Green Star. If a participant does not strive towards the next level of Lean & Green Star Award, it can undergo another assessment once the certificate has expired, to demonstrate that the reduction (>20%) in greenhouse gas emissions from the previous Star test has been maintained. If the participant passes this

assessment by the audit company, the validity of the Star certificate is extended by a further 3 years.

The Cluster for Logistics Luxembourg reserves the right to exclude the group of participants of every company that would misuse the logo, without prejudice to its right to initiate legal proceedings. However, the exclusion of group participants does not affect the responsibility of the participant with respect to the program and, where appropriate, any payments collected by the Cluster remains acquired.

4.5 Miscellaneous

The parties recognize the services provided by the Cluster for Logistics Luxembourg and approve the means that are invested. The Cluster does not in any way guarantee a positive evaluation of the action plan of the candidate by the auditing partner *DART Consulting* (or another pre-selected auditing entity), nor any right related to the use of the name and branding material of the program Lean and Green.

The parties state that the Luxembourg law is applicable to these regulations. If the validity or enforceability of any provision of this regulation is compromised, it will in no way affect the validity and enforceability of any remaining provisions of the ruleset.

In the absence of a settlement, all disputes relating to this Regulation shall be subject to the jurisdiction of the courts of Luxembourg.

This Regulation shall enter into force on the date of its signature by both parties and shall continue to apply during the whole duration of the program.

5 Background information on the different Lean & Green levels

The 1st Star level

Terms of participation

To receive the 1st Star certificate the participant must demonstrate that a minimum CO2e reduction of 20% has been achieved within 5 years. At least 50% of volume and/or CO2e emissions of all logistics activities need to be in scope, optionally including inbound and outbound flows to and from Luxembourg.

Data quality level

In order to meet the requirements of the 1st Star audit, following data quality level needs to be fulfilled: Bronze: Default figures (greenhouse gas protocol, GLEC, estimations etc.) of fuel and energy consumption per year in combination with volume shipped.

The 2nd Star level

Terms of participation

Lean & Green participants that have successfully passed the 1st Star assessment, together with those who are using the lateral entry option, are entitled to take part in the 2nd Star Program. The participant must be able to demonstrate that they will be able to maintain the CO2e reduction of at least 20% from the 1st Star program over the course of the 2nd Star program and that a further 10% CO2e reduction has been achieved within 3 years taking a minimum of 65% of volume and/or CO2e emissions in Scope. In addition to the quantitative measures, the participant must provide evidence that they have implemented one project that can be characterized as cooperation or innovation, ideally with a focus on supply chain optimization to achieve CO2e savings.

Data quality level

In order to meet the requirements of the 2nd Star audit, following data quality level needs to be fulfilled: 2nd Star - Silver: Actual figures of fuel and energy consumption per year in combination with volume shipped.

Recognized standards in the 2nd Star Program

Internationally recognized norms and standards may be used for the calculations in the context of the 2nd Star Program. The emission factor for energy consumption (diesel, electricity, etc.) must always be expressed *in terms of well-to-wheel figures* (in line with the current version of DIN EN 16258).

The participant's entire lorry fleet must comply with the *minimum requirements of the Euro* 5 norm. This must also be contractually agreed with subcontractors, and a sample contract must be submitted to the external auditing party. Existing contracts must be amended over time.

Like the 1st Star Program, the 2nd Star Program also focuses on the reduction of greenhouse gas emissions. The necessary measures to reach the target must be clearly defined and supporting documents submitted to the audit company for assessment. The quality of data must be sufficient to ensure clear significance. Wherever possible, calculations must be based on primary (raw) data.

The Lean & Green 2nd Star – from application to certification

A participant may enter the 2^{nd} Star Program within 3 years of having successfully passed the 1st Star audit. Entrance to the 2^{nd} Star Program requires a participant to submit their 2^{nd} Star concept to the national host. The external auditing party will conduct a desktop assessment of the concept. The assessment can also take the form of an onsite audit. If the

concept is given the all clear, the participant has a maximum of 3 years to implement their concept. A final assessment is conducted by means of an onsite audit.

The 3rd Star level

Terms of participation

For the 3rd star 5% reduction in 2 years has been agreed taking a minimum of 75% of volume and/or CO2e emissions in scope. In addition to the quantitative measures, the participant defines two individual projects/visions in the area of supply chain optimization. Requirements: All mandatory criteria are listed below. To successfully complete the 3rd Star Program, the participant must provide evidence that they have implemented two projects that can be characterized as cooperation or innovation, ideally with a focus on supply chain optimization to achieve CO2e savings.

Data quality level

In order to meet the requirements of the 2nd Star audit, following data quality level needs to be fulfilled: 3rd Star - Silver: Actual figures of fuel and energy consumption per year in combination with volume shipped.

The 4th Star level

Terms of participation

For the 4th star further 20% reduction in 2 years has been agreed taking a minimum of 85% of volume and/or CO2e emissions in scope. Currently, the process and concrete targets are still in development at the European steering committee.

Data Quality level

In order to meet the requirements of the 4th Star audit, following data quality level needs to be fulfilled: Gold: Actual figures of fuel and energy consumption per month and license plate.

The 5th Star level

Terms of participation

For the 5th star further 5% reduction in 2 years has been agreed taking a minimum of 90% of volume and/or CO2e emissions in scope. Currently, the process and concrete targets are still in development at the European steering committee.

Data Quality level

In order to meet the requirements of the 5th Star audit, following data quality level needs to be fulfilled: Gold: Actual figures of fuel and energy consumption per month and license plate.

6	Subscription Form	
---	--------------------------	--

Two copies signed in Luxembourg on	
For the Cluster for Logistics,	For (Company)
7, rue Alcide de Gasperi	
L-2981 Luxembourg	
	Address
	Name of Project Leader & Function
Rule Book Conditions	Rule Book Conditions
Read and Approved	Read and Approved
Signature	Signature