Charging infrastructure

aid scheme



Information webinar



Monday 02 May 10.30-12.00



LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG Ministère de l'Énergie et de l'Aménagement du territoire



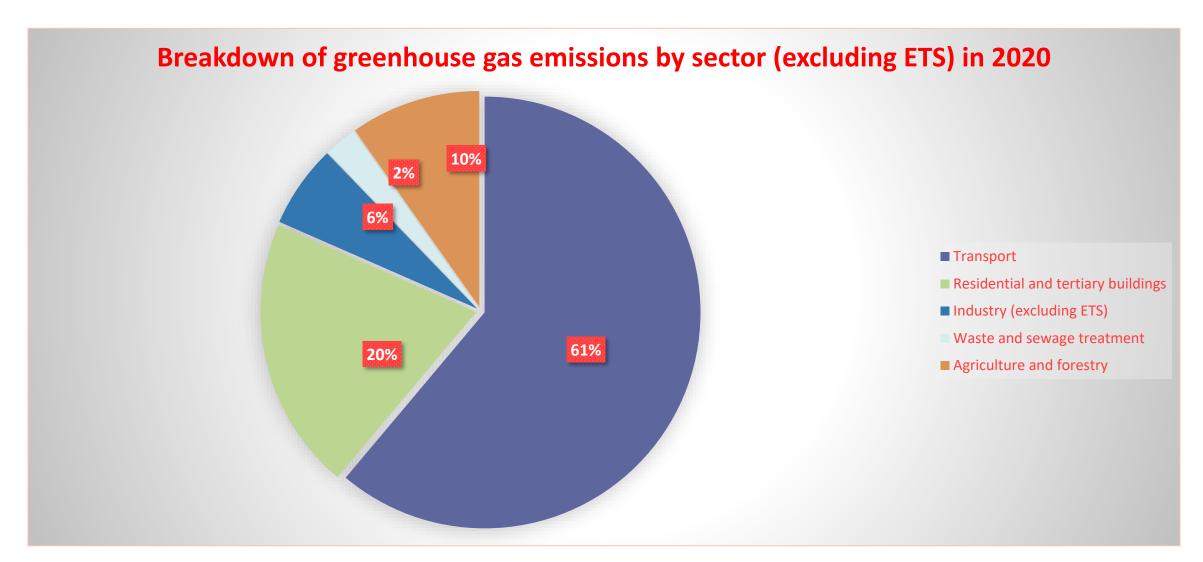
Bob Feidt

Ministry of the Economy

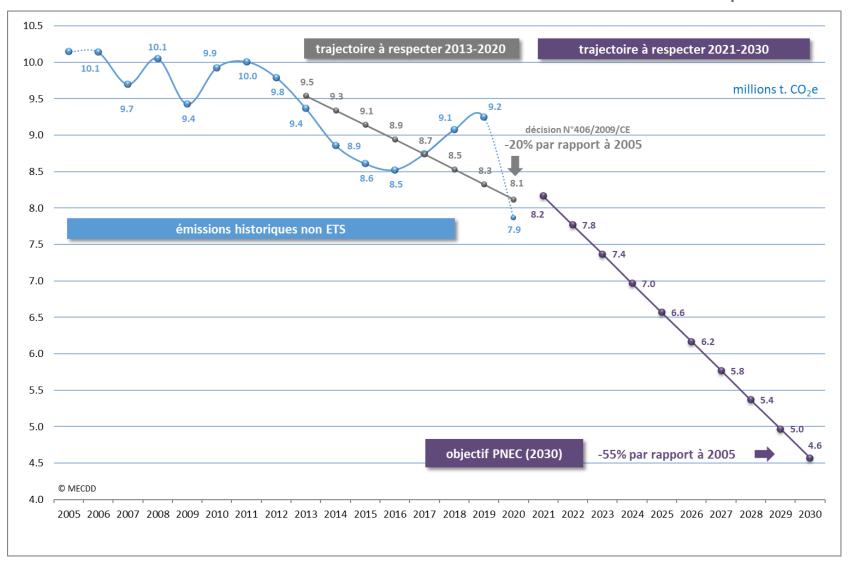






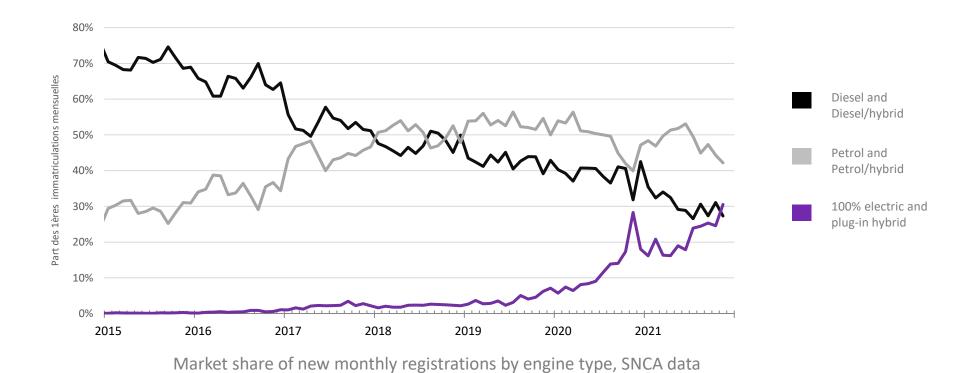








- 9,092 new registrations of electric cars (100% electric or plug-in hybrid) in 2021 (20.5% market share)
- 17,425 electric cars on the road in Luxembourg (3.9% market share)



Completing the offer of government measures



- Luxembourg intends to deploy a coherent and balanced set of support measures for all types of necessary charging infrastructure:
 - Financial aid for home charging
 - Development of basic public charging infrastructure ("Chargy" & "SuperChargy")
 - Financial aid for <u>publicly accessible</u> charging stations that are complementary to the existing public charging infrastructure
 - Financial aid for charging stations at the workplace and for the company fleet of vehicles











New draft law to complete support measures

Subject to the finalisation of the legislative and regulatory procedures: File 7925 is available on the website of the Chamber of Deputies

Axis 1

Aid for charging infrastructure granted following a competitive bidding process

Objective: Facilitate and accelerate the deployment of a larger charging station network and increase charging capacity in Luxembourg

Restricted to projects of a certain size

Financial aid based on calls for projects

Axis 2

Aid for charging infrastructure restricted to small and medium-sized enterprises

Objective: Encourage SMEs to make the transition to e-mobility in the context of their economic activity

Restricted to SMEs proposing a project with a limited budget

Financial aid on simple written request

The draft law also provides for an adaptation of the organisation of the "Chargy" and "SuperChargy" network in accordance with the new European legislative framework.

Beneficiaries and eligible costs



- DU GRAND-DUCHÉ DE LUXEMBOURG
- The benefits of the draft law are **restricted to companies**, i.e. any entity carrying out an **economic activity** and aiming to install charging infrastructure **in Luxembourg**.
- Aid can be granted to companies through a financial lessor.

Eligible costs

All costs relating to the necessary investments to create or increase the charging capacity of a charging infrastructure, in particular:

- the charging station(s)
- The grid connection and grid reinforcements (NB: a storage installation is eligible when it contributes to the reduction of the connection capacity needed for the charging infrastructure)
- the intelligent load management system (smart charging)
- devices enabling the transmission of data
- the payment system
- site signage
- associated civil engineering works
 - Eligible costs exclude taxes and other levies

Excluded

- second-hand components
- accessory components such as a roof, photovoltaic panels, etc.
- operating costs
- the costs that the company must incur to comply with the legislative, regulatory, or administrative provisions in effect
- preliminary study costs

Incentive effect and exclusions



- The aid **must incentivise** the company to carry out the project, which is not the case if it had carried out the project in the absence of state aid. The **incentive effect** of the aid is presumed when the company has **submitted an application before the start of the works**.
 - i.e. either the start of construction work related to the investment, or the first legally binding commitment to order equipment or any other commitment making the investment irreversible. The purchase of land and preparations such as obtaining permits and carrying out feasibility studies are not considered as the start of the works.
- Are also excluded:
 - companies in difficulty
 - companies that have not executed an order to recover aid that has been declared illegal or noncompliant with the internal market by the European Commission
 - the accumulation of multiple aids granted under this law
 - cumulation with other aid for the same eligible costs



> The charging infrastructures:

- are 100% powered by renewable electricity
- are **put into service within twelve months** of the granting of the aid (except for duly justified reasons unrelated to the beneficiary company)
- are operated for at least 5 years;
- are not intended for resale or rental, with the exception of financial leases
 which provide that the lessee acquires the charging infrastructure at the end
 of the contract
- offer reasonable prices that are easily and clearly comparable and transparent to end users
- if installed on the land of a third party, the owner's principle agreement concerning the use of the land must be attached to the request

Eligibility criteria (continued)



- Publicly accessible infrastructures must meet the following additional conditions:
 - Ad-hoc payment (+ price displaying)
 - Non-discriminatory with regard to the accessibility conditions and the prices charged to mobility service providers
 - Communication of static and dynamic data
 - Unavailability rate < 5% per charging point, and < 1.5% overall if the infrastructure contains >= 4 charging points
 - Accessibility to the public without prior notice (some possible limitations, e.g. paid parking)
 - If public land: renewable electricity purchase agreements and Chargy OK integration



Yann Trausch

Klima Agence GIE







Axis 1: Aid for charging infrastructure granted following a competitive bidding process



LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG

Charging infrastructure	Publicly accessible (24/7)	Semi-accessible to public (>=10h/day & 5d/week)	Private	
Minimum charging capacity per project		175 kW		
Absolute aid ceiling per company (group) in a given call for projects	1,000,000 €			
Maximum aid intensity (*)	50%	40%	30%	
Capacity weighing factor for the selection on the basis of the lowest amount of aid per charging capacity created	100%	80%	60%	
Examples	Charging infrastructure on public roads, petrol stations, airports, etc.	Gated supermarket parking, public parking without access at night,	Delivery fleet, Charge@work for employees,	

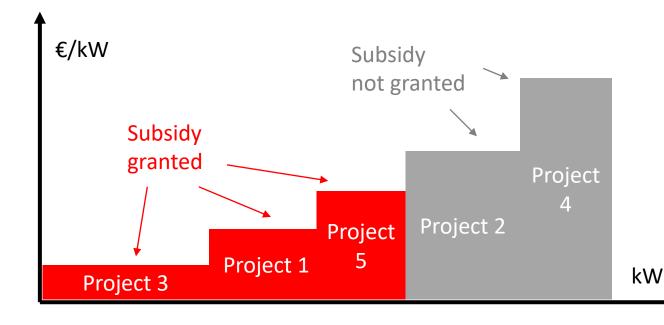
^(*) by way of derogation, the maximum aid intensity can be **increased to 70**% if the call for projects is limited to a certain category of infrastructure (e.g. trucks or a certain region)

Axis 1: Illustration of project selection





Project #	Capacity [kW]	Accessibility [h/24, d/7]	Subsidy requested: absolute value [€]	Subsidy requested: intensity [€/kW]	Subside requested: weighted intensity [€/kW]
1	1500	Private	90,000	60	= 90 000 / (1500*0.6) = 100
2	1500	24/24, 7/7	300,000	200	= 300 000 / (1500*1.0) = 200
3	2000	24/24, 7/7	100,000	50	= 100 000 / (2000*1.0) = 50
4	1000	Private	180,000	180	= 180 000 / (1000*0.6) = 300
5	1000	10/24, 5/7	120,000	120	= 120 000 / (1000*0.8) = 150



Budget of the call for projects: 400,000 €

NB: The maximum budget of the call for projects is published beforehand and can in no case exceed 7M€

Subsidies granted (Projects 3, 1, 5): 100,000

NB: at max. 90% of submitted projects are selected

+ 90,000 + 120,000

= 310,000 €

Subject to the finalisation of the legislative and regulatory procedures

Axis 1: Points to consider

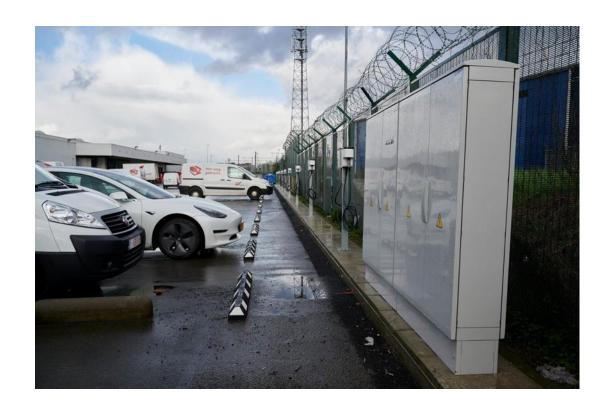


Points to consider when preparing a submission under Axis 1:

- Charging capacity considered for the call for projects:
 - AC: sum of the nominal capacities of the charging points (regardless of the grid connection capacity)
 - DC: sum of the maximum capacity that can be made available simultaneously for a minimum duration of one hour (@400V)
- A company can submit several projects for a given call for projects.
- When a project involves several charging infrastructures offering different degrees of accessibility, for the purposes of selection, it is treated as a project involving charging infrastructures offering the lowest degree of accessibility.
- Publicly accessible charging stations are subject to different specific requirements, but also allow a high maximum rate of aid and a favorable weighting in the selection of projects.
 - → Allocate projects wisely!

Axis 1: Illustrative example





Car park equipped with semi-public AC charging stations

50 charging points 22 kW

Type 2 (AC): 50 x 32 A x 3 x 230 V = 1.1 MW

(= charging capacity considered for the call for projects)

Estimated costs (including network connection): 207,200 €

Maximum subsidy: 82,880 €

Axis 1: Illustrative example





Photo: Electrify America

XL Charging Park

16 « Hypercharger 300 kW » stations 500 A x 400 V = 16 x 200 kW = 3.2 MW(i.e. charging capacity considered for the call for projects = 3.2 MW)

Estimated costs (including network connection): 2,080,000 €

Maximum subsidy: 1,000,000 €

Axe 2: Aid for charging infrastructure restricted to small and medium-sized enterprises



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Charging infrastructure	Small enterprise	Medium enterprise		
Maximum aid intensity	40%	30%		
Possible markup for smart charging (>= 4 stations)	+10%			
Max. aid intensity for network connection costs	60%			
Absolute aid ceiling per company	40,000 € for the costs relating to the increase of the charging capacity of the charging infrastructure, excluding connection			
(group)	60,000 € for the network connection costs			



Points to consider when preparing a request under Axis 2:

- > Absolute subsidy ceiling (40,000 € + 60,000 €) applies to the company, i.e. the group
- Application must be submitted before work begins
- Each company (group) can submit only one aid request for a project per year, but the absolute ceiling applies to the total aid of the lifetime of the regime

Subject to the finalisation of the legislative and regulatory procedures

Axis 2: Illustrative example





Photo: Powerdale

Private charging infrastructure for employees of a medium-sized company

4 charging points 22 kW Without intelligent load management system

Estimated installation costs:

9,500€

Estimated network reinforcement costs:

5,000€

Maximum subsidy: 5,850 €

Axis 2: Illustrative example





"Slow" charging infrastructure for a small company in an indoor parking lot equipped with 16 charging points

Including intelligent load management system that adapts the power made available by the stations in response to constraints external to the system

Estimated installation costs:

38.000 EUR

Estimated network reinforcement costs:

25.000 EUR

Maximum subsidy:

34.000 EUR

Axis 2: Illustrative example





Photo: ABB

2 fast-charging stations 150 kW

2 stations 150 kW

Estimated installation costs:

150,00€

Estimated network reinforcement costs:

120,000€

Maximum subsidy:

100.000 € (= ceiling)

Procedure and preparations



- DU GRAND-DUCHÉ DE LUXEME
- The aid scheme is subject to the finalisation of the legislative and regulatory procedures
- > The measure will likely enter into force this summer (not before June 2022)
- In the meantime, interested companies could already examine / plan certain aspects, e.g.:
 - ✓ Need in number and capacity of charging points as well as the mode of use
 - ✓ Capacity of the available electrical network and, if applicable, necessary reinforcement measures
 - ✓ Public accessibility models
 - ✓ Possibilities of a smart charging system
 - ✓ Costs and aid intensity required
- ... but without starting construction work related to the investment or making any legally binding commitment to order equipment or any other commitment making the investment irreversible

Support measures



- Submission of the request for aid and the request for payment via the Myguichet platform;
- Support by Klima-Agence and Luxinnovation to accompany companies in their efforts
- Publication of a FAQ on Guichet.lu









Yann Trausch Klima-Agence G.I.E



Klima-Agence accompanies you

Within the framework of the aid scheme, Klima-Agence offers the following services:

- > Facilitator for the purposes of the technical realisation of a project
 - Standardised documentation
 - Information on the procedures in place
 - Matchmaking via www.pro-charging.lu
- > Taking charge of project carriers
 - Promotion of matchmaking (municipalities <-> project developers)
 - Interaction with other groups (e.g. individuals, non-profit organisations, etc)
- General sensibilisation concerning e-mobility







Brochure « Comment charger votre voiture électrique ? »

- Regular updates, in particular with regards to the adaptations of the state subsidies
- > Target group: general public
- https://www.klimaagence.lu/fr/particuliers/mobilite/chargervotre-voiture-electrique





Planning guide for residential and functional buildings

- Periodic adaptations according to the evolution of the legal and technical requirements, as well as the evolution of the market
- Developed jointly with the Ministry of Energy and Spatial Planning, the DSO and external consultants
- Target group: experts (architects, engineers, planners, etc.)
- https://www.klima-agence.lu/fr/experts/boite-aoutils/dialoguer-avec-vos-clients





Information sheets to assist tradesmen and individuals in the installation and inspection of a charging station

Target group:

- Simplified version for individuals, SME and artisans
- Detailed version for tradesmen



Comparez les bornes de charge à domicile pour voitures électriques au Luxembourg

Pour mieux accompagner l'arrivée des véhicules électriques au sein des foyers, cet outil vous aide à comparer les modèles de bornes de charge disponibles sur le marché luxembourgeois. En tenant compte de l'usage de la borne, de ses fonctionnalités ou encore de l'éligibilité aux aides financières étatiques, vous pourrez identifier la borne qui correspond le mieux à vos besoins.

L'outil se limite à donner une évaluation préliminaire des bornes disponibles et ne prend pas en compte les systèmes collectifs de gestion intelligente de charge recommandés pour les bâtiments plurifamiliaux et fonctionnels.

La liste de bornes fournie par ce comparateur est non exhaustive. Elle se veut neutre et propose des modèles identifiés comme disponibles au Luxembourg. Cette liste est proposée par ordre alphabétique. L'octroi d'une subvention ne peut en aucun cas être revendiqué sur la base d'informations fournies dans ce simulateur. Seul le texte issu des lois et des règlements grand-ducaux fait foi. Pour de plus amples informations sur l'installation des bornes de charge et les aides étatiques vous pouvez contacter nos conseillers.

Si vous constatez que le modèle que vous recherchez n'y figure pas, merci de nous contacter par e-mail.

Vous recherchez le modèle le plus adapté pour une utilisation privée ?







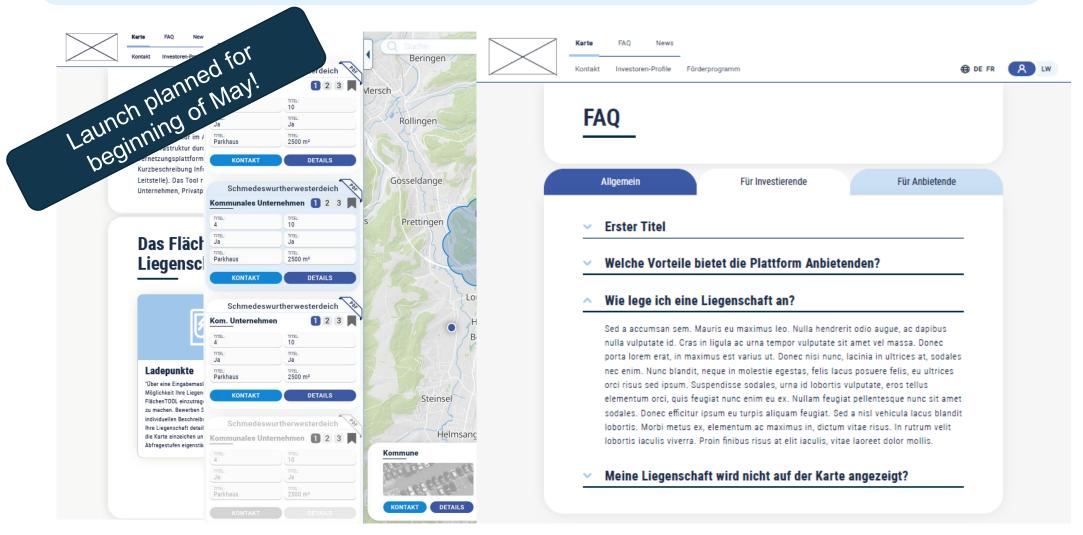
Charging station comparison tool

https://www.klima-agence.lu/fr/bornes-charge

- Request for additions via e-mobility@klima-agence.lu
- Regularly updated according to the requests received
- Target group: individuals, SME, tradesmen

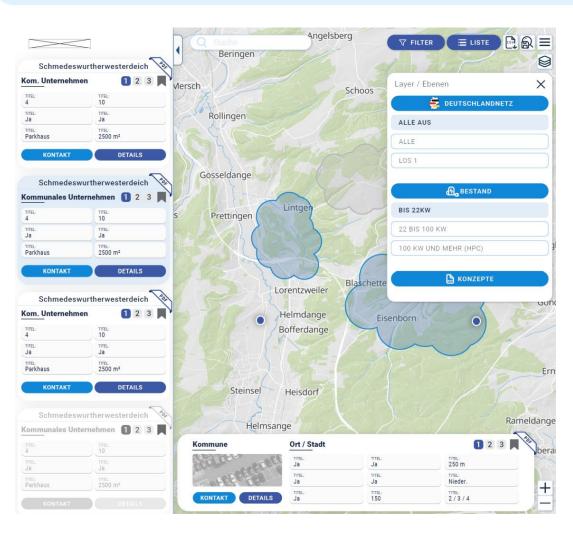
Grant scheme in favour of charging infrastructure pro-charging.lu





Grant scheme in favour of charging infrastructure pro-charging.lu





<u>Matchmaking tool</u> for municipalities and investors

- Interactive tool, freely accessible (registration needed to receive access to all functions)
- Interactive map indicating surfaces available for the installation of a public charging infrastructure
- Interested parties can contact the owners via this tool
- Possibility to get information on mobility concepts of the corresponding municipalities
- FAQ and additional information concerning the grant scheme

Grant scheme in favour of charging infrastructure Link with Climate Pact 2.0



Within the framework of the Climate Pact 2.0, municipalities can promote their efforts in the field of sustainable mobility.

In terms of strategy

Mobility and circulation planning

In terms of concrete projects

- Electrification of municipal vehicles
- Parking space management according to the sustainable mobility strategy
- Multimodal offer based on a needs assessment

In terms of the collaboration with their citizens and enterprises

- Communication with citizens and enterprises
- Financial support via grant schemes

Maximilian Przybyl

Luxinnovation





Support from Luxinnovation



Understand company needs



Define project scope and assess funding need

Identify most suitable funding schemes and possible research partners (public-private partnerships, Eureka/Eurostars, etc.)

Coaching (interdisciplinary approach)

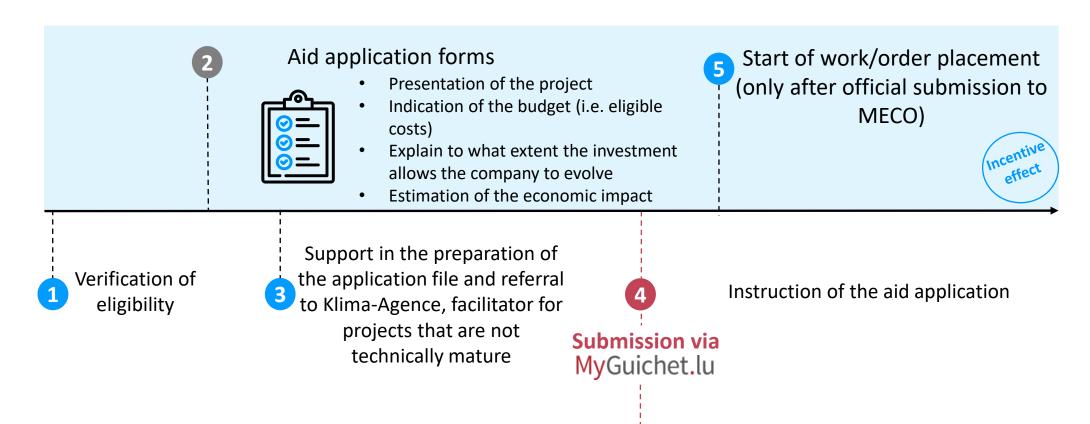
Application for RDI/ENV funding submitted to the Ministry of Economy



Steps to apply for a state aid from the Ministry of the Economy

LUXINNOVATION

#MakingInnovationHappen





European legal framework

Due Diligence of Luxinnovation- eligibility criteria:

Aid rates according to the company size

- Aid rates vary according to the size of the company (small, medium or large)
- ✓ The size of the company is assessed at the perimeter of its single economic entity (broad notion of Group).

Undertaking in difficulty

Companies considered to be "in difficulty" (accounting ratios) are not eligible for state aid

Cumulative rules

The same expenditure cannot be supported twice

Incentive effect

All companies: no retroactivity
The application for aid must be submitted before the work starts / orders are placed



Recommendations

What should the company do?

- Estimate its costs and describe the investment
- Explain the impact of the investment
- Apply for the required authorisations
- Fulfil the **evaluation criteria** of the Ministry of the Economy
- Submit your application via Myguichet



What can Luxinnovation offer?

- Checking eligibility criteria
- Assistance in using the application forms
- Assistance in calculating the size of the company
- Methodological support
- "Deciphering" regulations / laws / exceptions
- Advice, networking etc.







Contacts





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