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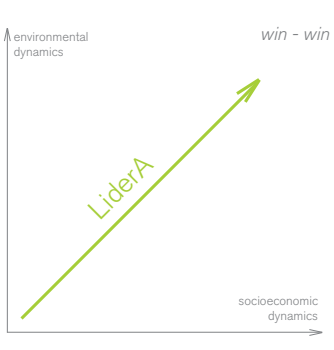
LiderA

VOLUNTARY ASSESSMENT SYSTEM FOR THE SUSTAINABILITY OF BUILT ENVIRONMENTS

www.lidera.info

Support system for the search, evaluation and certification of sustainable built environments

LiderA's mission aims to contribute to the creation, support, management and certification of sustainable built environments, supporting the demand for sustainable communities.



from sustainable constructions to sustainable communities

2010 [v2.0]

what is LiderA?

it is a voluntary sustainability assessment system for the support and development of sustainable solutions that assigns, in case of proven environmental performance, a certification by the Portuguese registered brand “LiderA - Sustainability Assessment System”.

how did it appear?

it emerged during a research, begun in 2000 by Manuel Duarte Pinheiro, in IST’s Architecture and Civil Engineering Department (Lisbon, Portugal), regarding the need for a system that could support, assess and contribute to the sustainable design and environmental management of built environments.

what are the main goals?

to support the demand for sustainability in the promotion, design, construction and management of built environments. LiderA aims to be a distinctive brand, Business to Business type, of buildings environmental performance levels and sustainable construction both in Portugal and Portuguese Speaking Countries.

to whom it is intended for?

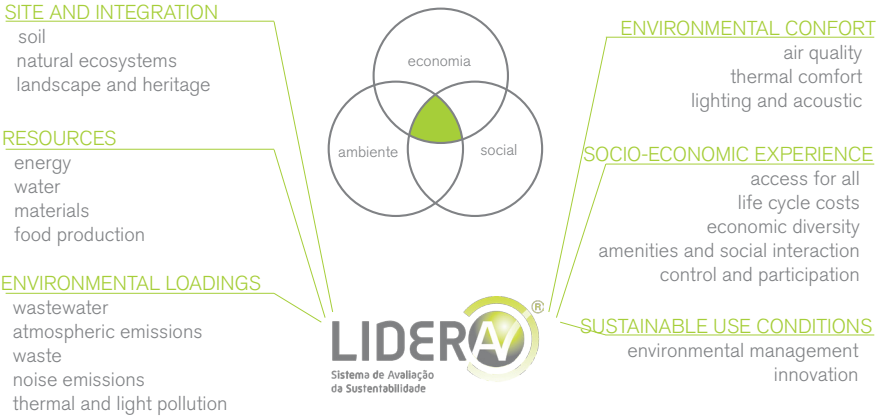
it is intended for Promoters, Designers, Builders, Building managers, and Clients and Users of built environments.

what does it assess?

it assesses residential, touristic, commercial, services, and other developments (buildings and intervened spaces), in each building’s life cycle phase, including large developments and / or built areas and / or building (s) and / or dwellings.

how is it organized?

the system is based on a set of six good sustainable performance principles (local integration, resources, environmental loads, environmental comfort, socio-economic adaptability, and environmental management and innovation) translated in 22 areas and 43 criteria, in which the built environment (based on the buildings) will be assessed in terms of its sustainable performance.



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which performance levels are considered?

it categorizes the path to sustainability according to different performance values (thresholds) that result from the achieved level and the type of use. The system classifies performance from an A to G range, where level E represents common practice and level A, in many criteria, corresponds to a performance 50% superior to level E, with level A+ corresponding to a factor 4 (or 75%), level A++ to a factor 10 (or 90%) and level A+++ to a regenerative factor.

how to facilitate the integration and development of solutions?

it is increasingly being used as an integrated approach for the development and promotion of plans, projects and solutions, both for new built environments and for the renovation and rehabilitation of existing buildings or developments.

how to certify and recognize?

after an independent verification by LiderA, in which it must be evident that environmental performance is within Class C or higher, the system make a recognition possible during design and planning stages and/or during the construction and operation phases the building or development’s good performance.

how to support management and sustainable use?

LiderA’s approach can support environmental management of construction works and operation use, in order to ensure the quest for sustainability.

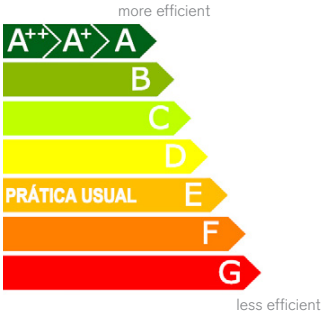
which are the defined costs?

costs depend on the type and size of the development, according to each different process, which may consist of supporting development solutions, environmental management, prior assessment and certification, in which costs are determined case by case. The certification costs sum up to 1500 € per case + 0.3 €/m2 of gross built area (GBA). The process values are reduced by 50% if a LiderA officer is involved, likewise the overall price will be reduced by 50% if there is an agreement with the municipality involved.

category	area	wi	criteria	n° c	performance
site and integration	soil	7%	territorial valorisation	C1	
			environmental deployment optimization	C2	
	natural ecosystems	5%	ecological valorisation	C3	
			habitats connection	C4	
6 criteria	landscape and heritage	2%	landscape integration	C5	
14%			heritage protection and enhancement	C6	
resources	energy	17%	energy certification	C7	
			passive design performance	C8	
			carbon intensity (equipment efficiency)	C9	
	water	8%	domestic water consumption	C10	
			local water consumption	C11	
	materials	5%	durability	C12	
			local materials	C13	
9 criteria			low impact materials	C14	
32%	food production	2%	local food production	C15	
environmental loadings	wastewater	3%	wastewater treatment	C16	
			wastewater use	C17	
	atmospheric emissions	2%	atmospheric emissions control	C18	
	waste	3%	waste control	C19	
			waste managment	C20	
			waste valorisation	C21	
8 criteria	noise emissions	3%	noise emissions control	C22	
12%	thermal and light pollution	1%	thermal and light pollution	C23	
environmental confort	air quality	5%	air quality levels	C24	
	thermal comfort	5%	thermal confort	C25	
4 criteria	lighting and acoustic	5%	lighting levels	C26	
15%			acoustic insolution/noise levels	C27	
socio-economic experience	access for all	5%	public transportation access	C28	
			low impact mobility	C29	
			accessibility to disabled people	C30	
	economic diversity	4%	fllexibility/adaptability	C31	
			local economic dynamics	C32	
			local work	C33	
	amenities and social interaction	4%	local amenities	C34	
			community interaction	C35	
	control and participation	4%	controllability	C36	
			participation and governance conditions	C37	
			natural risks - safety	C38	
13 criteria			human threats - security	C39	
19%	life cycle costs	2%	life cycle costs	C40	
sustainable use conditions	environmental management	6%	environmental information	C41	
3 criteria			environmental management	C42	
8%	innovation	2%	innovation solutions	C43	

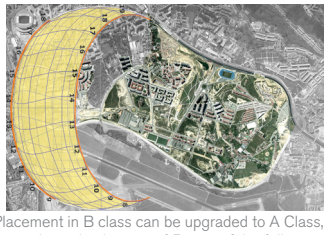
how to position within each criterion?

For each criterion it is possible, using LiderA's thresholds and comparing them with solutions and planned or implemented performances, to verify how the project stands against common practices (E class), and also how it surpasses this performance, for example: 25% will be a C class, 50% an A class, four times an E class is an A+ Class, and ten times an E class is an A++ Class. This approach allows positioning the value of each criterion in the path for sustainable environmental efficiency. By grouping the environmental performance in each criterion, it is obtained the performance by areas. When pondering performance in each area (wi) it is obtained the positioning by category and when pondering the performance in each category, it is obtained the global environmental performance and the class of sustainability.



how to apply for development?

The application may occur in the following terms:
(d1) contact the development team, that should be informed of the type of project in question, and its characteristics, in order to determine the thresholds and the adequate performance levels;
(d2) involve LiderA advisor (list available on site), agreeing the scope and steps to follow;
(d3) advising on sustainability, involving the positioning evaluation;
(d4) proposals for performance level and benchmarking;
(d5) facilitate the search for sustainability to LiderA officer;
(d6) implementation of solutions (in planning, designing, constructing and operating phases);
(d7) periodic assessment of LiderA's positioning, supported the collection of proofs that show it clearly, regarding future certification and improvement suggestions, for example for future management.



Placement in B class can be upgraded to A Class, with pay back times of 5 years if the following improvements are verified:
- Glazing and shading;
- Lighting equipment and low consumption:
- Water flow reducers;
- Used water reuse;
- Waste Recycling;
- Reduction of sound power

how to recognize or make it?

the project must have a good environmental performance that can be verified by existing evidences (documents), and from thereafter carry out:
(c1) contacts with the LiderA team in order to certify and agree on evaluation dates;
(c2) systematization of evidences of the project or enterprise that will be certified;
(c3) verification by an independent party of the performance levels found;
(c4) if performance levels top Class C or higher, attribute Certification / recognition by LiderA brand;
(c5) monitoring.

Lidera's certification is designated as recon in the planning and project phase, and certification in the building and operation phase.

which certifications exist?

the first LiderA certifications occurred in 2007 and have grown since then, encompassing different types and projects at different stages, including plan and design stages, construction stages and management stages.

Torre Verde (Loures) — *Hotel Jardim Atlântico (Calheta, Madeira)* — *Casa Peneda (Peneda, Gerês)*

Ponte da Pedra Fase II (Matosinhos) — *Conjunto Turístico Falésia D'El Rey (Óbidos)* — *Parque Oriente (Lisboa)*

Casa dos Arcos 42 Moradias (Óbidos) — *Casa Oásis (Estói, Faro)* — *Centro Escolar de Alcanede (Santarém)*

LIDERA
Sistema de Avaliação da Sustentabilidade

how to get further information?
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