

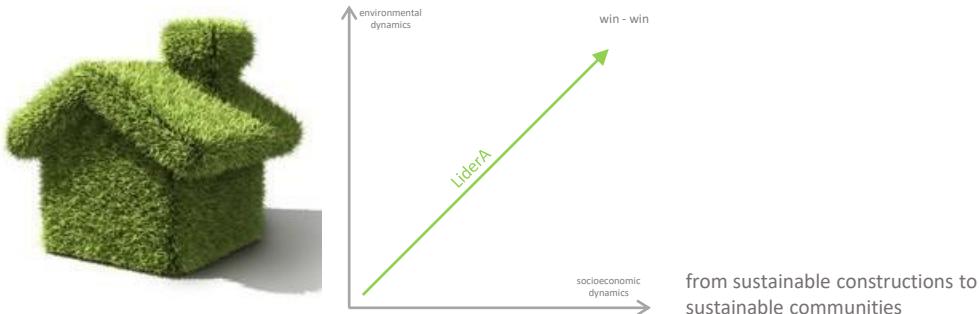
LiderA

VOLUNTARY ASSESSMENT SYSTEM FOR THE SUSTAINABILITY OF BUILT ENVIRONMENTS

www.lidera.info

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

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



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?

the LiderA system is been develop since 2000 by Manuel Duarte Pinheiro, in IST's Architecture and Civil Engineering Department (Lisbon, Portugal), to support, assess and contribute to the development of sustainability, either at the level of buildings, either at the level of exterior spaces and built areas.

what are the main goals?

to support the demand for sustainability in all life cycle phase: Promotion, design, construction and management of built environments. To be a distinctive brand of environmental performance and the sustainability of construction in Portugal and Portuguese Speaking Countries.

to whom it is intended for?

Promoters, Municipalities, Designers, Builders, Building managers, and Clients and Users of built environments.

What does it guide and assess?

developments (buildings and spaces of intervention), housing, service, tourist, commercial, among others, at any stage of its life cycle, including the development(s) as a whole and built area(s).

how is it organized?

the system is based on a set of six principles of good environmental performance (local integration (habitat), resources (flows), management of environmental loads (emissions), quality of service and resilience, socioeconomic experiences and sustainable use). They are specified into 20 areas and 40 programmatic criteria (programs). For each in which the constructed environments are evaluated according to their performance, in the path to sustainability.

which levels are considered?

define levels of sustainability with different performance values (thresholds), that result from the achieved level and the type of use of the development. The system classifies the performance of G to A++ (0 to 10), with level E representing the current practice (or benchmark); level A corresponds in many criteria to a performance about 50 % higher than level E, being level A + a Factor 4 (75 % higher than level E), level A ++ a Factor 10 (90 % higher than level E). In exceptional cases could be assign the A +++ level, if achieve a regenerative performance.

how to facilitate the integration and development of solutions?

it is progressively being used as an integrated approach to support the identification of more sustainable solutions for projects development and promotion of plans, both for new built environments and for renovations and refurbishment of existing buildings or developments.

how to certify and recognize?

after a process of independent verification by LiderA, in the case to confirm the performance in the search for sustainability, class C or higher is proven could be certify. LiderA make a recognition possible during design and planning stages and/or during the construction and operation phases the building or development's certify the good performance.



how to support sustainable development?

LiderA's approach has a specific version to support the development of the project in each life cycle phase, also the environmental management of the operation phase, in order to ensure a more efficient search of sustainability.

MAIN ISSUES

ORGANIZATIONAL MODEL



which are the defined costs?

The costs depend on the type and size of the development, the process involved, which may consist of supporting the development solutions, environmental management, prior assessment or certification, including advice, whereby value is determined on a case-by-case basis. The cost of certification is € 150 per process + € 1 / m² of built area (GBA) or 1500 € + 0,15 € / m² of built area what is more reduce. At that prices must be included additional the VAT. The process values are reduced by 50 % in cost per m², in case there is an assessor involved or in casse there is an agreement with the municipality, where the project is inserted. In the case of buildings and developments of high built areas the value must be obtained by contact with LiderA.

CRITERIA

Category	Area	Wi	Pre-Req.	Criteria	Nº P	Objective	Wi	Optional
Local Integration (Habitat)	Soil	4 %	Y	Territorial organization	P1	Develop territorially. Promote the use of sites already with intervention that need rehabilitation or infrastructure.	2 %	-
				Enhance soil functions	P2	Ensure the natural functions of soil. Reduce occupation of the whole plot to ensure natural soil functions in some areas.	2 %	-
	Natural Ecosystems	4 %	Y	Ecological valorisation	P3	Promote local ecological value, include vegetation and local or adapted species.	2 %	-
				Ecosystems services	P4	Increase ecosystem services and their interconnection between different zones, including with the surrounding.	2 %	-
6 Criteria	Landscape and Heritage	4 %	Y	Landscape valorisation	P5	Contribute to enhance landscape, integrating local elements and qualifying architecturally and culturally.	2 %	-
12 %				Built heritage valorisation	P6	Contribute to enhancement of built heritage, promoting the use of materials and built buildings (rehabilitate).	2 %	-
Resources (Flows)	Energy	15 %	Y	Passive Performance	P7	Ensure bioclimatic performance. Improve the passive performance of the building.	5 %	-
				Energy Systems	P8	Ensure energy efficiency in energy systems.	5 %	-
				Carbon management	P9	Contributing to reduce carbon emissions. Use renewable energy and low carbon solutions in life cycle.	5 %	-
	Water	7 %	Y	Moderate water use	P10	Use water rationally for service, ensuring efficient systems.	5 %	-
				Local water management	P11	Contribute to manage water locally in the plot.	2 %	-
	Materials	7 %	Y	Products and materials of responsible origin	P12	Promote the use of materials with good environmental performance and /or responsible origins.	1 %	-
8 Criteria				Durability of built environments	P13	Increase the durability of materials, constructive solutions and systems, in cases that are not temporary, throughout their lifetime.	6 %	Yes
30 %	Food Supply	1 %	Y	Contribution to local food production and access	P14	Consider the possibility of producing food (or aromatic herbs). Promoting the use of local food or facilitate their access.	1 %	-
Management of Environmental Loads (Emissions)	Wastewater	1 %	Y	Wastewater management	P15	Reduce wastewater, separate gray and black waters, treat and reuse treated pre-water.	2 %	-
	Waste	3 %	Y	Waste management	P16	Reduce the amount of waste and create the conditions to be able to recover, reuse, recycle and recover materials and energy (4Rs).	3 %	-
	Other Emissions	3 %	Y	Noise management	P17	Reduce noise sources and manage acoustic emissions (location, schedules, insulation).	3 %	-
5 Criteria		2 %	Y	Management of atmospheric emissions	P18	Reduce sources of atmospheric emissions, their loads and toxicity, if possible take advantage of thermal or other components.	1 %	-
10 %		1 %	Y	Other loads	P19	Reducing the heat island effect and lighting (avoid radiant pollution).	1 %	-

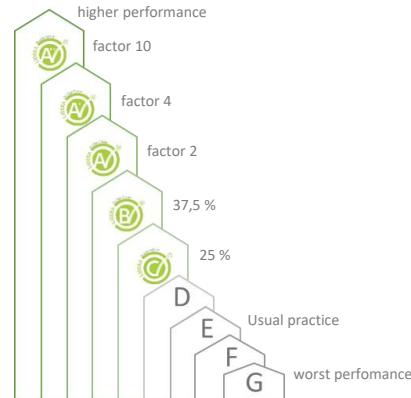
CRITERIA

Category	Area	Wi	Pre-Req.	Criteria	Nº P	Objective	Wi	Optional
Quality of Service and Resilience	Service Quality	9 %	Y	Environmental quality and other aspects	P20	Ensure environmental quality, comfort and associated services.	7 %	-
				Safety and control of risks (human)	P21	Ensure an adequate level of security against human risks (intrusion and others).	2 %	-
4 Criteria	Structural Adaptation	6 %	Y	Climate adaptation and other natural hazards	P22	Contribute to reducing potential extreme effects and adaptation to climate change, as well as ensuring reduction to other natural hazards.	3 %	-
				Resilience and adaptation	P23	Create capacity to find an adequate balance for significant changes in systems and to adapt in a dynamic and evolutionary way.	3 %	-
Socioeconomic Experiences	Accessibility	4 %	Y	Active mobility	P24	Contribute to the development and access systems and solutions of active mobility (pedestrian, cycling and others).	3 %	-
				Efficient transport systems	P25	Promote access and development of efficient public transport.	1 %	Yes
	Space for All	4 %	Y	Inclusive built areas	P26	Buildings with accessibility for all, ensuring inclusive solutions and operation modes.	3 %	-
				Inclusive spaces - Accessible and safe streets and public spaces	P27	Contribute to secure safe and accessible public spaces (common or not).	1 %	Yes
	Social Vitality	4 %	Y	Flexibility and complementarity of uses	P28	Ensure that built environments are flexible and can allow or evolve into complementary uses.	2 %	-
				Contribution to community well-being (Health, ..)	P29	Ensure good health and well-being conditions in common spaces and in the community.	1 %	Yes
				Social responsibility (and vitality)	P30	Promote interconnection with the community and contribute to socially responsible actions and encourage vitality.	1 %	Yes
	Amenities and Culture	3 %	Y	Friendly amenities	P31	Contribute or create the conditions to have friendly amenities or guaranteed access to them.	2 %	-
				Contribution to culture and identity	P32	Value culture and identity (constructive solutions, information, etc.).	1 %	Yes
12 Criteria	Green Economy (and Sustainable)	7 %	Y	Low life cycle costs	P33	Developing lower cost solutions in the life cycle (from the initial phase to end phase).	5 %	-
				Contribution to circular economy	P34	Contribute or create conditions for the circular economy and endogenous local activities.	1 %	Yes
				Contribution to green jobs	P35	Contribute or create conditions for greener services and activities and / or local employment.	1 %	Yes
Sustainable Use	Connectivity	3 %	Y	Connectivity and Interaction (Digital Systems)	P36	Ensure the possibility of digital connectivity, functions and interaction resulting in a safe and appropriate manner.	3 %	-
	Sustainable Management	5 %	Y	Information management for sustainable performance	P37	Develop solutions and information for a more sustainable performance of the user.	3 %	-
				Maintenance and management for sustainability	P38	Implement management and maintenance systems for sustainability.	1 %	Yes
				Monitoring and governance	P39	Communicate performance and engage stakeholders in governance for sustainability by interconnecting to monitoring.	1 %	Yes
	Marketing and Innovation	3 %	Y	Marketing and innovation	P40	Innovate and promote sustainability. Use sustainability to position itself in the market.	3 %	-

how to position within each criteria?

for each criterion (program) it is possible, using the LiderA's thresholds and comparing them with the solutions or performances (designed or implemented), to verify how the project stands against the reference practice, if it is equal is class E, if performance improves, for example: in 25 % will be a C class, 50 % a class A, 75 % an A + class, and 90 % an A ++ class.

this approach allows to positioning the value of each criteria in the path of environmental efficiency and sustainability. By grouping the performances of the criteria (program), the performance in each area is obtained, when weighing the performance in each area (w_i), is used to obtained the positioning for the category and the global environmental performance and the class of sustainability.



how to apply for development?

the application may have the following steps:

- (d1) define the scope, that is contact with the development team, with which to assess the type of development, its characteristics and the achievement of appropriate thresholds and performance levels;
- (d2) involvement of LiderA's assessor (list available on the website) agreeing on the scope and steps to follow;
- (d3) project file registration available at www.lidera4all.com and www.lidera.info;
- (d4) Identify the solutions for sustainability, involving the positioning evaluation with assessor;
- (d5) collect proofs of proposal performance;
- (d6) facilitate the continuous process of search for sustainability for all team involve;
- (d7) design or implement of the solutions (in the plan, in the design, in the construction and in the operation);
- (d8) 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.



Lisbon Green Valley | Lot 307 and 306



Gymnastics Academy of Guimarães

how to recognize or certification is done?

The project must have a good environmental performance that can be verified by proofs (documents), and from thereafter carry out:

- (c1) contacts with the LiderA team in order to certify and agree on evaluation dates;
- (c2) registration file, on the LiderA system website, available at www.lidera4all.com or www.lidera.info, filling in the form available;
- (c3) systematization of evidences of the project or development that will be certified;
- (c4) independent verification of evidence and levels found, by an independent party;
- (c5) in case of class C or higher, carry out the attribution of the certificate/recognition by the LiderA brand;
- (c6) implement the marketing program, solutions and monitoring.



LiderA certification in the plan and project phase is called recognition and in the construction phase and operation is called certification



which certifications exist?

the first certifications by LiderA occurred in 2007 and since then has grown, covering different typologies and uses in built environments, in different phases, from the plan phase or design, construction or operation, from new construction to rehabilitation, and from the scale of the community, to developments and buildings.



How to get further information?

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www.lidera4all.com | www.lidera.info

