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Sustainable green building strategies in France

« HQE FOR URBAN PLANNING AND DEVELOPMENT »: AN OPERATIONAL APPROACH IN THE INTERESTS OF SUSTAINABLE PLANNING

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A LOGIC OF PROGRESS

It was inevitable that the High Environmental Quality (HQE, in French: *Haute Qualité Environnementale*, HQE) standard for buildings should encourage the creation of an HQE adapted to planning projects. Before the HQE Association had even begun working on the matter, operators used the "buildings" system to create economic activity zones or urban districts offering a variety of habitat and activity programmes.

In France, a 1976 law on nature protection made environmental impact studies obligatory, particularly for significant planning projects. Over the last 35 years, urban planners have had to incorporate environmental considerations into their projects, so now it is up to the construction sector to continue this good work. Unfortunately, this law often goes unheeded, both by the major projects it covers, without producing all the expected effects, and by minor projects, which are not required to adhere to it despite the fact that their ultimate cumulative impact is far from negligible.

Although it was not subject to these legal obligations, the construction industry, with significant support from certification organizations, voluntarily made enormous progress in terms of the HQE approach in the course of the 1990s and 2000s. Paradoxically, it is more advanced today than urban planning when it comes to tools recognizing its efforts towards sustainable development. A major part of the progress made has therefore come from the construction industry, i.e. at the level of complex but well-defined projects that affect a product, and the HQE approach is nowadays very much mastered by the actors involved at this level.

The *HQE for Urban Planning and Development* certification was created in 2002 as a result of the desire of both the HQE Association and planners to meet an evident need for harmonized methods. A "planning" equivalent to the Construction approach was needed. As the increased complexity of the issue at hand called for prudence, the HQE Association and its partners decided to build on the existing experience in the field. Hypotheses were made, based on the knowledge already acquired by the construction industry, and were tested. Two experimentation phases, both providing a wealth of insight, were needed in order to create a certificate for the different assemblies, procedures and typologies involved in urban and town planning.

The *HQE for Urban Planning and Development* certification will continuously evolve and adapt to meet the requirements of regulators and planners.

HQE for Urban Planning and Development was launched in France in November 2011 and was met with keen interest. The France Green Building Council, convinced of the certification's innovative and universal value, has expressed its support for promoting it internationally.

***HQE for Urban Planning and Development*™: PROMOTING THE INTEGRATION OF SUSTAINABLE DEVELOPMENT, AMONGST TERRITORIES, ARCHITECTURE AND URBANISM**

The HQE Association is well-aware that the performance of a building in terms of sustainable development is largely dependent on its context. This means the building must be considered as part of a fully-fledged urban-planning project. Therefore, professional planners are convinced that sustainable towns cannot come about simply by juxtaposing technical solutions and HQE buildings.

Sustainable development, as an institutional reality, began with the Rio Conference in 1992 and it is now present in national, European and worldwide policies. As a result, planners and local authorities have had to consider the question "How can urban planning be made High Environmental Quality?"...

The legislation of developed countries provides the objectives in terms of sustainable development and HQE, but not always the means for achieving them. Moreover, good industrial practices sometimes precede the relevant regulations (e.g. participation in all planning procedures is not stipulated by law, neither in France nor in Italy nor in other countries). Therefore, the various actors involved looked forward to the creation of a general approach helping them to achieve the sustainable-development and HQE objectives as defined by law.

The HQE Association provides public authorities and planners with a methodology that is perfectly suited to the operational assembly of installations and to the rules of the various professions involved, thus helping them in building their project. *HQE for Urban Planning and Development*™ offers an integrated approach to environmental, social, economic and urban questions, while being adapted to the standard procedures of planning operations. This requires asking the appropriate questions and possessing the appropriate skills, while also being open to debate between alternative points of view at appropriate moments.

A MATURE AND CONCERTED APPROACH

The broad and multi-disciplinary representation of players and partners has contributed to the development of shared references and methodology concerning the key points characterizing sustainable urban and town planning:

- ✓ The French National Association of Land Subdivision Planners and Developers ,
- ✓ The French Federation of Local Public Enterprises,
- ✓ The French Engineering and Consulting Chamber,
- ✓ The French Scientific and Research Centre for Building,
- ✓ The French Social Housing Union,

- ✓ The National Union of French Architect Associations,
- ✓ The French Order of Surveyors,
- ✓ The French Agency for Energy and the Environment

It is noteworthy that these players, all essential in their respective domains, often had no experience of working together when the development of the HQE Planning certification first began. The fact of bringing them together was in itself progress towards more sustained development.

The effort to create the *HQE for Urban Planning and Development*[™] certification was highly collaborative and comprised the following steps: feasibility study, full-scale experimentation, building solid consensus among the partners and, lastly, development of an appropriate certification procedure:

- ✓ 2002: Launch of discussions and studies, with the participation of the French Ministry for Culture, the Ministry for Equipment, and the French Agency for Energy and the Environment
- ✓ 2006: Drafting of the "Experimentation Guide for Planners and developers" [*Guide*, under the auspices of the HQE Association
- ✓ 2007-2010: Experimentation on ten operations
- ✓ 2010: Drawing up of the "Guide to the *HQE for Urban Planning and Development*[™] approach" by the HQE Association
- ✓ 2011: Development of the *HQE for Urban Planning and Development*[™] certification system by Certivéa

This maturation period was necessary in order to define a common operational culture for sustainable planning among professional players. Indeed, the establishment of methods having sustainable development as their end goal required constant dialogue between the numerous parties involved.

OPERATION MANAGEMENT SYSTEM, A CORNERSTONE IN SUSTAINABLE PLANNING

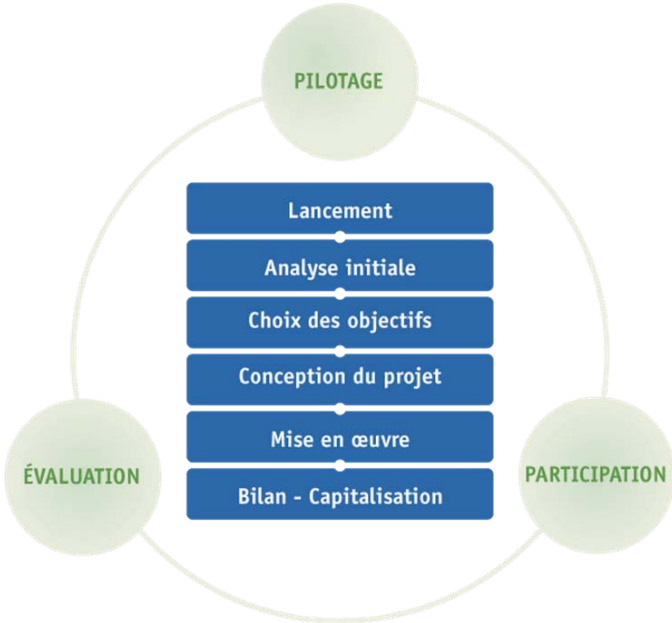
The *HQE for Urban Planning and Development*[™] certification can be applied to all planning operations, independently of the project's owner (public or private), size, procedure, geographical context or destination. The certification reference system defines the applicable requirements for the characteristic phases involved in conducting a planning operation. Through the implementation of the Operation Management System (OMS, in French: *Système de management d'une opération, SMO*), the reference system underlines the importance of the project's management methods.

As a project management tool, the OMS contributes to the governance and implementation of sustainable planning operations: its objective is to master the analysis, scheduling, design, implementation and transfer processes, in order to optimize the players' behaviour with regard to sustainable planning.

Sustainable planning: no easy solutions, but necessarily contextualised responses

The end goal of *HQE for Urban Planning and Development*TM, far from providing ready-made solutions and recipes, is to certify, by means of an independent and credible certification procedure (i.e. by an independent third party¹), the robustness of an approach that results in appropriate, relevant and fully contextualised consideration of the sustainable development challenges involved in a planning operation on one's territory. The goal is not to impose on public and private planning players a model (methodological, technical, economic or cultural), criteria or solutions for scheduling, design or management, independently of the context. On the contrary, the goal is to acknowledge the project's "local intelligence" and place it at the centre of the sustainable planning effort.

A REFERENCE SYSTEM WITH REQUIREMENTS CORRESPONDING TO THE SIX KEY PHASES INVOLVED IN CONDUCTING PLANNING OPERATIONS

| Structure of the Guide to the <i>HQE for Urban Planning and Development</i> TM approach | Structure of the <i>HQE for Urban Planning and Development</i> TM certification reference system | | |
|--|---|--|--|
|  | Requirements by Phase | Recurring Requirements | |
| | Phase 1: Launch | Participation Evaluation Steering | |
| | Phase 2: Initial analysis | | |
| | Phase 3: Selection and contracting of objectives | | |
| | Phase 4: Design of the project incorporating sustainable development | | |
| | Phase 5: Implementation | | |
| | Phase 6: Report - Knowledge-building | | |

¹ French regulations set out a very strict framework for certification activities. Both in France and abroad, although not required to do so, Certivéa has adopted and applies the highest level of requirements with regards to its interventions. In particular, within our certification systems, the Auditor must provide all the guarantees that the parties involved might expect in terms of neutrality and independence. There may be no conflict of interest between the Auditor and the Audited entity, and to this end, auditors are selected for their expertise and for the total absence of any links whatsoever, past or present, with the players of the audited operations. This constitutes a true guarantee that the certification is a transparent, reliable and independent tool.

The certification reference system (a short document of some 20 pages) establishes the requirements that apply during the various characteristic phases of a planning operation (specific requirements for each phase). As such, it emphasizes the project management methods and establishes requirements as to the conducting of the operation, some of which reoccur at each phase, as they refer to the operation's organizational and/or coordination challenges (Participation/Evaluation/Coordination).

Inset 1: The Specific Requirements of the OMS for each phase

PHASE 1: Launch

1. Expectations and motivations of the local community or communities
2. The commitment of the developer to the HQE Urban and Town planning approach
3. The commitment of the community or communities to the HQE Urban and Town planning approach
4. Operation management procedures
5. Participation of the parties involved
6. Multidisciplinary team

PHASE 2: Initial analysis

1. Sustainable-development diagnostic
2. Review of the regulations and local approaches
3. Sharing of the diagnostic
4. Suitability of the operation with regard to sustainable development

PHASE 3: Selection and contracting of objectives

1. Thematic analysis of the initial studies
2. Prioritization of the challenges
3. Breakdown of the challenges
4. Operator awareness-raising
5. Operation sustainable-development objectives charter

PHASE 4: Design of the project incorporating sustainable development

1. Operation programme
2. Sustainable-planning part
3. Design incorporating sustainable development

PHASE 5: Implementation

1. Transcription of the sustainable-development objectives into requirements
2. Inspection and monitoring during implementation
3. Evaluation of the construction projects
4. Worksite management
5. Raising awareness amongst buyers and future users
6. Keeping buyers and managers informed

PHASE 6: Report - knowledge-building

1. Urban and Town planning HQE approach report
2. Project report
3. Knowledge-building
4. Post-operational follow-up

N.B.: These specific requirements, appropriate to any France-based operation, may be approached in a more generic manner by Certivéa and its partners on an international level, mobilizing experts to evaluate the conformity of operations in a manner appropriate to the institutional and geographical context of the country concerned.

A NON-PRESCRIPTIVE, THEMATIC APPROACH THAT COMPLEMENTS AND ENHANCES THE SYSTEM

In the French version of the *HQE for Urban Planning and Development*TM certification approach, the planner and the communities must ensure that the initial analysis and studies are exhaustive and appropriate, by cross-checking and completing them, if necessary, with a thematic approach, in order to identify the operation's sustainable planning challenges. The 17 themes described in Part 3 of the Guide to the HQE Urban and Town Planning approach cover the entirety of the major sustainable-development challenges. As such, they each need to be analysed within the context of the operation.

Inset 2: The 17 sustainable urban and town planning themes of the Urban and Town Planning HQE approach

Ensuring the integration and coherence of the district with the urban fabric and the other territorial scales

1. Territory and local context
2. Density
3. Mobilities and accessibility
4. Heritage, landscape and identity
5. Adaptability and scalability

Conserving natural resources and promoting health and environmental quality for the planning

6. Water
7. Energy and climate
8. Materials and equipment
9. Waste
10. Ecosystems and biodiversity
11. Natural and technological risks
12. Health

Promoting local social life and boosting the economic dynamics

13. Project economics
14. Social functioning and diversity
15. Atmospheres and public spaces
16. Integration, training and awareness-raising
17. Attractiveness, economic dynamics and local industries

This requirement invites the developer to work on an exhaustive complementary analysis, whether or not they were involved in the prior study phases. The planner intervenes as appropriate, more or less upstream of the project, according to the procedure and to the community policy, which can differ in terms of the choice of design engineer and planner at a later stage or, on the contrary, as upstream as possible in observance of the regulations.

The task of conducting a thematic analysis of the initial studies involves different challenges depending on the length of time (short or very long) elapsed between the preliminary studies and the initial design phases (for which the *HQE for Urban Planning and Development*TM approach requires the operation's objectives to be selected and contracted, according to a clear process established in Phase 3, which begins with this additional thematic analysis). Upstream of the formalization of the programme's components, this involves

re-examining, enhancing and completing the studies, in order to obtain exhaustive analyses across all of the themes constituting sustainable development on the scale of an operation.

***HQE for Urban Planning and Development*TM: CURRENT POSITIONING AND UPCOMING WORKS**

Through its approach and the associated certification, *HQE for Urban Planning and Development*TM takes the position of:

- ✓ Laying down the necessary requirements that represent a first stage in the dissemination of good practices in sustainable operational planning.
- ✓ Favouring the use of evaluation tools that form part of the project's management in a suitable and contextualised manner.
- ✓ Constituting the first operational tool to offer players a response adapted to their current concerns, appropriate to the level of maturity of their practices and tools, together with independent third-party recognition.
- ✓ More specific and sector-based complementary approaches as soon as they have reached maturity.

It can thus be asserted that *HQE for Urban Planning and Development*TM constitutes an added-value basis (or indeed one that can be required, as it refers to the fundamental principles of the approaches) for any planning operation, and which can –

- ✓ Structure the use of indicators pre-existing locally for operation typologies having been subjected to advanced work to define performance-based elements to be achieved (eco-district, etc.); and -
- ✓ Validate the use, in accordance with appropriate arrangements, of locally-defined evaluation tools, with regard to locally-relevant challenges and objectives, which contribute in a consistent and contextualised manner to the pursuit of the sustainable-development goals.

*HQE for Urban Planning and Development*TM is now operational and compatible with any approach satisfying part of its requirements, whether relating to the diagnostic, project management, definition of objectives or evaluation. *HQE for Urban Planning and Development*TM contributes to sustainable development being taken into consideration, highlighting the "intelligence of the projects", within the context of operations intending to form eco-districts, or within other operation typologies and contexts. Seen from this perspective, the approach aims at the generalization of good practices in operational planning and its systematic contribution to sustainable development. When listening to the partners of the HQE Association, and considering the test audits and the approaches undertaken by our partners within their urban projects, one sees that this positioning responds to a clear societal need.

The audits already implemented, together with the available benchmark and analysis elements, indicate the course to be pursued in order to consolidate the added value of the approach. As in other fields, it is desirable for relatively homogeneous evaluation methods, representing generic challenges of general interest, to be used increasingly systematically. The challenge here is that their use does not precede the

consolidation of practices, in order to enable collective knowledge to reach maturity, without rushing the required stages. Consequently, it is the will of the HQE Association and its partners to see the *HQE for Urban Planning and Development*TM approach associated with evaluation tools in future.

Based on the consolidation of practices that are still to be built, and as they mature, the partners of the HQE Association and Certivéa will present the players with tools, in which they will be able to recognize their own questions and reference points, constructed collectively and validated through their usage.

We will end by introducing an upcoming line of work, which looks set to become essential: as with construction, it will involve developing, within a given time frame, a certification procedure relating to the exploitation and usage of the installations - in order to further promote, over time, the performance and contribution to sustainable development as desired by the parties involved.

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The **HQE certification** covers buildings life cycle for any kind of buildings:

- Design, Construction, Operation; New & Renovation
- 12 million square meters certified
- 500,000 housings certified
- In France and abroad

Certivéa is the French accredited body for non-residential buildings certification

- Subsidiary of the CSTB, French Scientific and Research Centre for Sustainable Buildings
- Close partner of the HQE Association, French Stakeholders Platform for Sustainable Buildings
- Founding member of the France GBC, WGBC member established 2011

For further information, or to express an interest in the implementation of certification test auditing internationally:

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Quoting the reference: "HQE-A/EcoWebTown".

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