

# ESTIDAMA - The Sustainability Initiative of the Abu Dhabi Urban Planning Council

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Estidama, the Arabic word for sustainability, is the sustainability initiative of the Abu Dhabi Urban Planning Council (UPC). Abu Dhabi's Plan 2030 establishes a clear vision for sustainability as the foundation of any new development occurring in the Emirate of Abu Dhabi.

The purpose of Estidama is to create a new sustainability framework that will direct the current course of development while allowing adaptation as new understanding evolves. Its ultimate goal is to create an ever improving quality of life for the residents of the Emirate on four equal pillars of sustainability: environmental, economic, social, and cultural.

Estidama arose from the need to properly plan, design, construct and operate sustainable developments with respect to the traditions embedded within the rich local culture on one hand and the harsh climatic nature of the region on the other. To this end, project owners, developers, design teams and even residents need to think differently about how they approach the design and planning process.

Estidama began two years ago and is the first program of its kind that is tailored to the Middle East region. In the immediate term, Estidama is focused on the rapidly changing built environment. It is in this area that the UPC is making significant strides to influence projects under design, development or construction within the Emirate of Abu Dhabi.

Estidama is continually evolving to embrace the rapidly changing concepts for sustainability, and ground them in the environmental, social, cultural, and economic needs of the GCC region. There are three rating systems under Estidama: the Pearl Community Rating System, the Pearl Building Rating System and the Pearl Villa Rating System.

## **Pearl Community Rating System**

The aim of the Pearl Community Rating System (PCRS) is to promote the development of sustainable communities and improve quality of life. The PCRS encourages water, energy and waste minimization, local material use and aims to improve supply chains for sustainable and recycled materials and products.

An Executive Council Order of May 2010 states that all new community developments must meet Estidama requirements starting in June 2010. Following this mandate, significant effort has been made to align the PCRS with the Abu Dhabi Development and Building Codes.

The PCRS is applicable to developments that are multiple plot subdivisions, with a vehicular network and community facilities or amenities. A fundamental part of the PCRS is the requirement for master plan teams to develop Pearl Rating targets and guidelines for all buildings within the community.

## **Pearl Building Rating System**

The aim of the Pearl Building Rating System (PBRS) is to promote the development of sustainable buildings and improve quality of life. Achievement of a sustainable building requires the integration of the four pillars of Estidama together with a collaborative and inter-disciplinary approach to building development. The PBRS encourages water, energy and waste minimization, local material use and aims to improve supply chains for sustainable and recycled materials and products.

An Executive Council Order of May 2010 states that all new buildings must meet Estidama requirements starting in September 2010. Following this mandate, significant effort has been made to align the PBRS with the Abu Dhabi Development and Building Codes.

The PBRS is applicable to all building types, their sites and associated facilities, including hospitals, warehouses, industrial buildings, laboratories and hotels. Any building constructed for permanent use and that is air-conditioned must meet the PBRS requirements.

Multiple building or campus style projects can elect to use the 'multiple buildings' approach to simplify submissions and reviews. Project teams wishing to apply the 'multiple buildings' approach must contact UPC's Estidama team for approval and guidance.

All buildings with more than 40,000 m<sup>2</sup> of GFA will be evaluated by the UPC for the PRS rating. Nonetheless, the building must be registered with the Municipality that has jurisdiction over the location of the building, and follow the building permit process.

### **Pearl Villa Rating System**

The aim of the Pearl Villa Rating System (PVRS) is to promote the development of sustainable villas and improve quality of life. Achievement of a sustainable villa requires the integration of the four pillars of Estidama together with a collaborative and inter-disciplinary approach to villa development known as the Integrated Development Process. The PVRS encourages water, energy and waste minimization, local material use and aims to improve supply chains for sustainable and recycled materials and products.

An Executive Council Order of May 2010 states that starting in September 2010 all new villas must be designed to meet Estidama requirements. Following this mandate, significant effort has been made to align the PVRS with the Abu Dhabi Development and Building Codes.

The PVRS applies to any new stand-alone enclosed permanent structure to be built on a new or existing plot, and containing one dwelling unit for use by a single household, or a multi-residential building of three or less stories above grade that houses multiple dwelling units.

Thousands of new villas will begin construction in the Emirate of Abu Dhabi and this system will improve the quality, comfort and sustainable performance of these villas.

Both UPC and the local municipality are involved in evaluating PVRS submissions. Individual villas and projects with less than 10 villas will be evaluated directly by the Municipalities as part of their already established building permitting process.

### **Estidama & Development Review**

Planning permission from the UPC is required for all strategic developments in Abu Dhabi. After a project receives Detailed Planning Approval, then the full requirements of the PRS Design Rating become applicable. Achievement of the Design Rating is required before obtaining building permits from the Municipalities.

The Design Rating application is linked with the building permitting process at the relevant Municipalities and must be made at the end of the construction documentation stage. The Construction Rating application must be made on completion of construction. Following submission of the Pearl Design Rating application to UPC, the Estidama team will review the application and provide feedback and comments to the Municipality. The relevant Municipality remains responsible for issuance of building permits.

There is no public disclosure of information provided as part of the submission requirements. Information provided will remain confidential, except as required for identification of the project and its key participants for the purposes of providing Estidama certification.

Estidama is not simply a rating method; it is a vision and a desire to achieve a new sustainable way of life in the Arab world. The ultimate goal of Estidama is to preserve and enrich Abu Dhabi's physical and cultural identity, while creating an ever improving quality of life for its residents.

By promoting a new sense of responsibility with Estidama, the UPC is going beyond other sustainable development initiatives around the world, by creating new tools, resources and procedures crucial to the 2030 vision.

**\*Source: [estidama.org](http://estidama.org)**