Architects are involved with multiple layers of action with the limitation of their competences. Conflicts between environmental needs and design opportunities dragging out the architects activity from the drafting boards to an expanded field of various professions and interests. “Thermodynamic Somatisms/Verticalscape 2” was a master's design studio title initiated by Inaki Abalos on his revolutionary concept on searching a hybrid conception of design procedures which comprises traditional and disciplinary needs related to social and new technological changes which appeared at the turn of the century. Verticalscape can be understood as a meeting point of architecture, landscape and environment, acknowledging a new understanding on modern knowledge which aims to merge biological and social sciences. The studio has been developed a spatial grammar and syntax associated with thermodynamics, through the definition of an operative experimentation with zero energy-balance open and closed system to find a proposal for an operational grammar. This paper will try to explain the steps and design processes towards a energy sensitive mixed sports complex in Madrid. This is kind of an exercise to investigate new design process dealing with time-based strategies on the concept of Thermodynamic somatism.

At the first step we have tried to understand the thermodynamic processes in different formal consistency and aggregation to find an optimal way to sustain energy for long. Then we have tried to find couple of functional combinations to obtain a maximum energy balance system considering winter and summer energy consumption for two different locations. After that we have tried to find a formal expression regarding external certain climatic considerations. Materiality also has come to sustain the system for such functional combinations. Then at the end the final product has been investigated regarding the processes we have passed through.

**Key words:** Thermodynamic, Technology, Energy, System, Environment.