EconCore's ThermHex honeycomb technology is a cost efficient, continuous sandwich panel production technology to be used in various, cost sensitive application areas.

It allows for combination of honeycomb cores made from different thermoplastics with skin sheets of various material types into lightweight sandwich panels.

During a first production step thermoplastic polymers are extruded into a film, vacuum formed and folded into a honeycomb core.

Different thermoplastics can feed the process. Most popular are polyolefins, but PET, bio plastics, PVC, ABS, PS, PC, PMMA, PA, PPS and others are in the scope of our technology.

In a second step of the production process, skins are laminated onto the honeycomb, directly after the core is made. The skins can be made of the previously mentioned thermoplastic materials, but also composite, wood-based, aluminum or steel skins can be applied.

Compared to conventional sandwich panel production technologies, ThermHex provides an optimal product performance at a minimal manufacturing cost.

Additional cost reduction can be offered for the final part due to the possibility of integration of post processing operations (e.g. corona treatment, creasing, thermoforming ...) in line with the continuous honeycomb sandwich panel production process.
The ThermHex honeycomb core is used in various, cost sensitive application areas like packaging, interior design, automotive, building & construction, etc.

EconCore offers engineering services to select and optimize core-skin material combinations providing the optimal balance between production costs, weight savings and performance. EconCore offers turn-key solutions for those OEM’s that are interested in our production line concepts.