**Sustainability concept**

Algae are an ancient organism, which survived millennia of global change. Algae grow by consuming or absorbing carbon dioxide (CO₂) and release oxygen (O₂) through photosynthesis like any other plants. Through this process, algae transform solar energy into chemical energy and produce bio-fuel. Pleura Pod consists of recycled sources and stands in symbiosis with nature. The jury commends the project’s bold vision and objective to explore uncharted terrain.

**Further authors**

Beomki Lee, Suk Lee and Daeho Lee, students, Massachusetts Institute of Technology, Cambridge, MA, USA

---

**Pleura Pod**

Air purification wall transforming carbon dioxide into oxygen, Cambridge, MA, USA

**Main authors**

Daeho Lee, Beomki Lee and Suk Lee, students, Massachusetts Institute of Technology, Cambridge, MA, USA

**Project data**

Context: Architecture, building and civil engineering  
Client: Massachusetts Institute of Technology  
Background: Research project  
Planned start: September 2013

**Summary and appraisal by the jury**

The jury was at first struck by the beauty of the submitted project and was progressively won over by both its technical ingenuity as well as intellectual rigor. Made of recycled material, the layers of the wall installation are all transparent, visually exposing the inner workings of the façade that functions as an artificial lung. Exploring the possibilities of bio-minery, the project offers strategies for understanding architecture in symbiotic relation with nature. The jury commends the project’s bold vision and objective to explore uncharted terrain.