

## **Jury pronouncement Urban +/extract**

Technology, Energy, Plus-House

*Ripple Effect pursues energy balance through a complex mix of sources, predominantly using PV cells combined with solar heating, a bio-digester producing both heat and electricity (CHP), plus district heating. Cooling is solved by use of a central cooling plant. This means that both heating pipes and cooling pipes are needed throughout the building. The investigation of sources is interesting and well argued.*

*Ripple Effect has used significantly lower electricity production per m<sup>2</sup> PV in their calculations than the other entries. When adjusted to the same level, calculations show that neither solar heating nor PV panels on the north façade are necessary in order to meet the +2kWh/m<sup>2</sup> requirement. By these adjustments the net gain is improved from +3,4 to +5,5 kWh/m<sup>2</sup>/y, best in the competition.*

*On the negative side, emissions amount to nearly 12.000 T CO<sub>2</sub>, very close to the reference building's 13.000 T. This is largely due to a very high proportion of concrete in construction cores (can be reduced to 10.300 T by reducing 3 cores to 2).*

*The concept is robust and well argued. Interestingly, the building has a classical elegance that in no way announces its environmental qualities. As such it is an excellent example of high quality office building architecture with cutting-edge environmental solution discreetly integrated. The Jury finds this angle refreshing and promising, in addition to innovative.*