Project name	Kolon e+ Green Home
	
Keywords	Energy plus, eco plus, emotion plus, passive house, biomimicry
Start of project	2010
End of project	2011 (still in operation)
Contact person or organisation	Kolon Global R&D Center
Short project description / project function	Kolon e+ green home is the representative project by Kolon construction company to realization of sustainable passive house.
Water	Water spaces by using water circulation system and green water technologies were implemented. Rain water recycling, plumbing integration system, and grey water treatment system developed by Kolon were applied. Water saving toilet bowls, faucets and pedals are installed. The shape of roof was designed to harvest rain water advantageously. Watering system for green roof and wall is operated.
Energy	A number of technologies related to energy are implemented in this detached house. Systems to produce energy, and to make good residential environment in terms of energy are as follows: BIPV system, radiant cooling system, radiant ceiling panel system, high efficiency heat recovery ventilator with air cleaning system, cool tube, geo thermal heating system, EIFS (External Insulation & Finish System), PCM (Phase Change Material) window, etc.
Biomass	/
Project benefits	To realize concepts of this builidng, 95 green technologies were applied including renewable energy generating systems in practice. In terms of architectural design, the e+ green home has succeeded to propose new design considering

	efficient use of nature in Korea.
Project level	Pilot project
Financial scale	n/a
Environmental conditions	January mean temperature: -4.8°C, August mean temperature: 26°C, Latitude: 37.28°, Longitude: 127.22°
Altitude	n/a
Description of special local conditions	n/a
Context Zero Emission Buildings	Kolon e+ green home is a passive house model made to utilize various passive design elements. The technologies in the construction include technologies that reduce CO_2 emission, recycle materials, natural ventilation systems and lighting systems.