



IntelliHouse

Climate changes, CO₂, and renewable energy mark the information and news flow that constantly hit the consumers. The consumers' everyday life is far away from the politicians visions, the aim of which is to ensure the population a joint, sustainable future. The visions imply that we, the consumers, change our behaviour and consume less energy. Currently however the effort of the individual consumer has only a poor impact on the overall global energy consumption, and the consumer may feel that his contribution is a drop in the sea. *The Intelligent House Project* will change this situation by optimising the energy consumption of the home in accordance with the behaviour of the consumer. The expected outcome is a significant reduction of the homes overconsumption of energy.

The challenge lies in creating a system in the home that observes the behaviour and preferences of the residents and automatically adjusts the resource consumption accordingly.

The solution to the core problem is to introduce a system that controls the indoor climate of the home based on running observations of the residents of the home. Such a system identifies the residents and learns their preferences and expected behaviour. By means of other information sources, the system will then automatically adjust to the residents activity patterns. Such patterns may include the GPS of the family car, information from an electronic calendar, a transmission mast, a mobile phone, etc. The information can support the systems estimate of a persons arrival in the home and prepare for the right room temperature. The system may also adjust the indoor climate of the bedroom e.g. based on data compiled on open doors and windows.

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