Energy Express

In the current economic climate, householders are trying hard to reduce their expenses, especially in those areas badly hit by recession and unemployment. The rising cost of energy is also having a negative impact on households.  There is great potential for energy savings and emissions reductions by improving energy efficiency in the housing sector. Success in this area would improve energy supply security, reduce carbon emissions and would also reduce household costs through lower utility bills.  The most important user needs met by the project are saving on energy consumption (and reduced utility bills) whilst maintaining the existing quality of life (or improving it).

However, there are major barrier to home occupants in taking action to reduce energy consumption, which may be summarize as follows:

§  Confusion – Whilst we are all familiar with the home environment, homes are very complex socio-technological systems, with numerous factors affecting climate control and energy consumption.  It is a challenge even for experts to develop sensible packages of simple cost effective efficiency measures.  For a typical occupant without guidance and structure the confusion is too great.

*Note: A substantial amount of information is distributed by governments (at local, regional and national level) and by technology and service providers.  However, at times this glut of information may only increase confusion. Therefore, a key market barrier is not information availability, but the lack of relevant information for the specific situation of each household.*

§  Trust – Most choices for implementing efficiency measures involve the selection of products or services about which the occupant is poorly qualified to evaluate.  Usually these are being promoting directly by those with a direct profit motive to sell and there is still limited benchmarking of such products and services.  This results in a considerable barrier relating to trust.

§  Motivation – Since a sensible package of measures is likely to involve a wide range of products, services and behavioral changes, a typical house occupant would not know where to start.  The result is that a motivational paralysis sets in and occupants tend to take minimal (or even no) measures to improve energy efficiency.

The project seeks to overcome these barriers by developing integrated packages of energy efficiency, measures which are independently verified.  These measures would also be implemented at scale (in millions of homes), which is expected to bring major benefits in terms of evaluation of the best technology and services, efficient implementation and cost effective delivery (preferably through public-private sector partnerships).  A key to success with be to make the services simple and easy to access for the occupants.  Energy Express will provide targeted, personalized support for each householder in a consistent high-quality manner in order to build confidence.

Key steps in the service will be a) analyzing and establishing energy consumption and efficiency patterns according to the different household types; b) standardizing the approach and visits to the households; c) developing a protocol for household visits that would enable technicians to consistently perform to high standards while educating and supporting the occupant(s) in their efforts to adopt more energy efficient habits. Energy Express focuses on low disruption (first phase measures), but would also create a platform to future interventions which are likely to be more involved and higher capital cost.

Energy Express will also seek to influence and change the behavior of occupants, teaching them how to use less energy while enjoying the same or an even better quality of life.  The Energy Express project aims to help home occupants to reduce energy consumption by a) offering a clear fully supported action plan for each household b) providing confidence that measures proposed are will be highly effective and have been independently verified c) making a the cost benefits transparent (this may often include an element of public funding) and d) providing assurance about all good and services provided.