

GENERAL APPROACH AWARENESS

LEICESTER UNITED KINGDOM

Even the best technologies will not be sold or applied if people do not know much about it or if they doubt its efficiency. This is even more the case for newly emerging technologies where the way it works needs to be proven and made known. In order to raise awareness of renewable energy sources, a city can use different methods; such as setting up information campaigns, financing pilot installations or subsidise its inhabitants when they install renewable energy installations. But there are still more subtle methods like teaching in schools, or setting up organisations which carry out awareness raising campaigns. The city of Leicester – member of Energie-Cités - has implemented many innovative activities of this kind.

GENERAL ASPECTS

Leicester is situated in the middle of England in the county of Leicestershire. It has approximately 280,000 inhabitants. The city was established by the Romans and was later controlled by the Vikings. Today, Leicester is a centre for the railway-, clothing- and electric industry. It also has 2 universities. Leicester has, like Birmingham and Nottingham, a "unitary status" which means that the power of the central administration in the city is greater than in other cities in England.

Climatic data:

Degree days (basis 15.5 °C): 2,570
Annual mean temperature: 10.5 °C



CONTEXT

Leicester City Council has for many years been active in energy and environment matters. Already in the seventies,(after the first oil crisis) the city created a committee with responsibility for taking a closer look at solutions. In 1983, "Leicester Ecology Trust" was founded. The objective was to re-develop non-urban areas. In 1990, the city was designated as the UK's first environmental city. Since then, Leicester has achieved a reputation for being the city of promotion and development of sustainable policies.

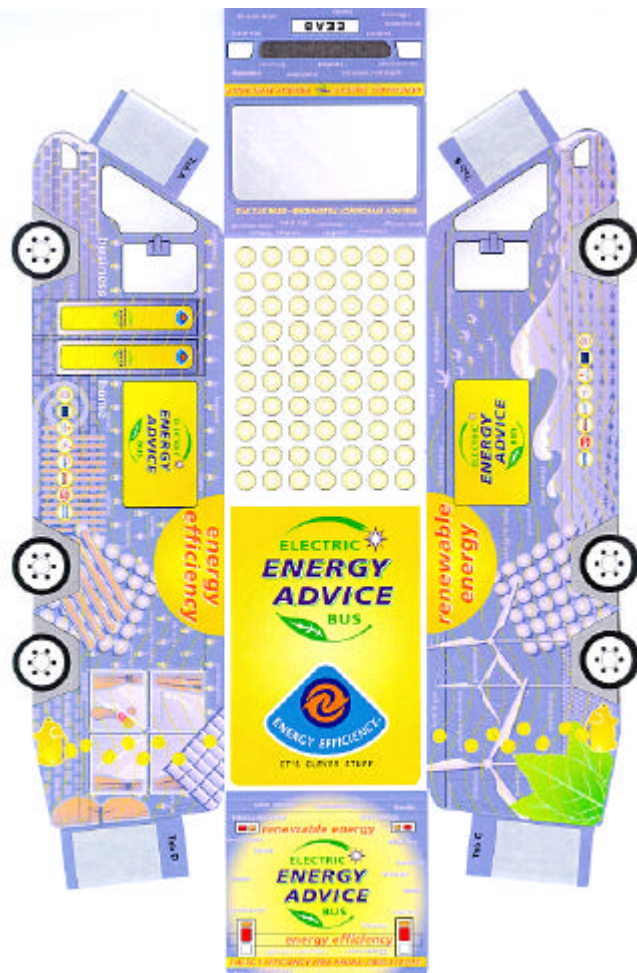
In the "Written Statement" of December 1994 (The Local Plan for Leicester) it is clearly stated that the city council, as a local planning authority, is committed to the designation of Leicester as the first environmental city. Leicester began working on a local Agenda 21 plan in 1994. The plan covers many aspects including the involvement of citizens. It states how things could be done and how citizens could be encouraged to participate. It is important to understand that nothing can be realised without local commitment – this means not only the City Council but all the way down to every citizen. 15 different indicators have been chosen to monitor the state of affairs in the Agenda 21 work. These include crime rates, pollution, unemployment and so on.

EXPERIENCE OF LEICESTER

Leicester City Council's activities concerning renewable energy sources (RES) are partly aimed at the actual installing of RES-installations. But the largest share of its activities concern "awareness raising campaigns". These are dedicated to a very large public and also to very different target groups.

Information and educational measures

A means of disseminating RES information that has been put into service quite recently is the "energy efficiency bus". This bus goes to different sites in Leicester, among them small and medium sized companies, domestic dwellings and schools. It is equipped with solar panels and is recharged during the night with electricity from RES. Being conceived as an interactive means, the bus is connected to the internet and supplies its visitors with actual data on traffic and pollution in Leicester. It is also intended that other cities will be able to talk to the bus via their web sites and become involved with schools in Leicester projects in the future. To the right a cardboard cut out of the bus is shown. This is given to small school children in order to make them gain knowledge of the bus' existence.



The local energy agency in Leicester tries to set up measures in the field of sustainability which will live on in Leicester's schools. The change in the statute of the City of Leicester (becoming a unitary status) enabled the agency to develop contacts in schools and jointly set up energy efficiency measures.

Some national programmes have also helped them in setting up measures; a state aid of 50 % for energy efficiency investments, that can go up to 6,000 Eur or schemes linked to the savings made through energy. These measures include feasibility studies, the follow up of energy and water consumption, the distribution of documentation for teachers, software and a homepage on energy subjects.

In general it is foreseen, that by motivating young people to adopt good environmental manners, they will retain this all their lives. Working with schools in Leicester, the Energy Efficiency Centre which is partly funded by the European Commission (SAVE-program) and partly by Leicester City Council, has introduced three main themes:

1. Improving the Building Energy Efficiency Standards,
2. Introducing Energy Wardens within the schools,
3. Introducing an Energy Education Package for teachers and students.

Within item 3 is a combination of all three actions and the specific involvement of students to help implement monitoring of their own school. Combined with the "energy efficiency bus" it will allow schools from all over Europe to visit Leicester in the future.

Plug into Green Energy

But the activities are not only restricted to schools and school children. There are many campaigns which are dedicated to inform all the inhabitants of the city – both RES and general energy efficiency measures. One example is the "plug into green energy"-campaign, which promotes green electricity and suggests that citizens apply for green electricity only. All this work is taken care of by Leicester's Energy Efficiency Advice Centre.

Realisations

In order to give an example of the use of RES (their practicability and feasibility) Leicester City Council has installed different types of solar energy in the city. In January 1997 a classic solar collector was installed on the City Council's office building "New Walk Centre". The investment amounted to approximately 19,000 Eur and saves 4,200 kWh per year. This saving has been apparent since 1998 when the New Walk Centre was first supplied 100% with electricity based on renewable sources from the East Midland Electricity/PowerGen. This is a large step towards the city council's intention of supplying the city with 20% green electricity by the year 2020.

PLUG INTO GREEN ENERGY

SUPPORTED BY THE FRIENDS OF THE EARTH, THE LEICESTER ENERGY EFFICIENCY ADVICE CENTRE & ENERGY AGENCY HAVE JOINED FORCES TO HELP YOU... **PLUG INTO GREEN ENERGY.**

THE CHOICE IS YOURS

From 1998 you will be able to use your consumer power to purchase electricity generated from renewable sources such as the sun, wind and waves as well as energy efficiency packages. You will no longer be obliged to contribute to all the environmental problems associated with conventional electricity such as Climate Change, Acid Rain and Radioactive Waste.

WHY NOW?

1998 sees the end of a long period of changes in the UK energy industry since privatisation in the 1980's.

WHAT IS IT ALL ABOUT?

Put simply, it means that the electricity and gas suppliers will be competing for your custom in an open market.

You will no longer have to buy your electricity from your current supplier.

You will be able to buy from any supplier in the country.

And your gas too!

This is a unique opportunity to reduce your personal impact on the natural environment and switch from polluting electricity generation to clean, abundant renewable energy.

CONTACT US NOW!

We can put you in contact with companies who realise that the way forward is clean, renewable energy & energy efficiency.

We are at:
2-4 Market Place South, Leicester.
LE1 5HB. Tel: 0116 2995146

Leicester Energy Efficiency Advice Centre

In 1997 the old boiler supplying the large office building of the city council called Phoenix House with hot water was subject to replacement. A solution was found whereby a low NO_x-fired condensing gas boiler combined with a solar collector were installed for the price of approximately 30,500 Eur. The annual gas bill has, because of this, been reduced by about 2,100 Eur corresponding to a saving of CO₂ emission of almost 18 tonnes.

But Leicester City Council's activities do not stop at only informing the city's inhabitants – it also tries to influence country wide political decisions. In order to do so, Leicester City Council took part in the foundation of an organisation called Midland Renewable Energy Technology Transfer, MRETT, founded in 1996. This association now consists of more than one hundred different members. The initial idea was to bring together the research experts of different universities in the area in order to disseminate information about RES. Evidence of this can be seen in the many seminars that MRETT is offering, for example on sustainable housing. Another activity is the regular publication of a newsletter called "Renewable Energy Prospects"

But today, MRETT's activities include much more than only information campaigns. MRETT also lobbies the British Governmental Institutions.

Finally, MRETT is at the moment trying to set up a programme called "LGA 1000 solar roofs project". This project at installing 1000 photo voltaic roofs on local authority buildings all over England in the next two years.

Last but not least, MRETT's own office is a good example of the feasibility of all kinds of RES-installations. The building is an old farmhouse in Loughborough, about 15 kilometres from Leicester. The building has been totally renovated and the overall demand for energy is now 100 kWh/(m²a), which is quite low. The building has, among other features been equipped with:

- a passive solar heat collector,
- low energy lightning,
- passive cooling,
- extensive insulation,
- low energy windows,
- a solar energy powered air condition system,
- use of rain for watering.



The picture to the right shows the building with the PV-panels just under the roof. The total heated area is 105 m².

EVALUATION AND PERSPECTIVES

The United Kingdom, as a country with a very early liberalisation of the energy market and few sympathies for state subsidies funding large projects, does not give the best conditions for the implementation of renewable energy sources. Thus, Leicester City Council aims at a strategy that puts the emphasis on informing, promoting, giving good examples and lobbying. Now, they are going further and expanding their activities in order to show good examples of the use of RES; like the "LGA 1000 solar roofs project". Keeping in mind that the climate for renewable energies in the United Kingdom is not the best, makes the activities carried out by Leicester City Council all the more remarkable.

FOR FURTHER INFORMATION

Leicester City Council
Don Lack (Director Leicester Energy Agency)
Energy Efficiency Advice Centre. 2-4 Market Place South.
UK - LEICESTER LE1 5HB
Tel: +44 116 29 95 132
Fax: +44 116 29 95 137
E-mail: don.lack@energy-advice.co.uk
<http://www.energy-advice.co.uk>

This case study was prepared by Energie-Cités in co-operation with the municipality of Leicester. It received funding from the ALTENER Programme of Transport and Energy of the European Commission

