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POWER
Low Carbon Economies



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Community Engagement on Low Carbon Living

TrIsCo Project Findings

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Annex 1: Good Practices



Introduction



In response to ambitious targets to reduce greenhouse gas (GHG) emissions governments across the European Union have introduced a number of low carbon initiatives. Early interventions through mass communications campaigns have been undertaken to support policy and promote low carbon lifestyles¹. However, these initiatives are often perceived as being imposed on citizens who do not necessarily relate them to their own lives. In order to change this perception and bring about lasting changes in people's behaviour; communities need to be empowered through facts, direction and support to take specific action, adopt new technologies and work together to deliver CO₂ reductions.

TrIsCo (Transition Island Communities: Empowering Localities to Act) was a two year project – July 2009 to September 2011 - aimed at overcoming the barriers to implementing low carbon communities. With a focus on different 'islands'² of communities (households, businesses and public organisations) the project strived to identify and understand what works best to bring people together and to encourage collective action to reduce CO₂ emissions.

Central to TrIsCo's impact was the exchange of experience, expertise, good practice and training by a multi-disciplinary team. The project was a joint venture between six organisations in six regions:

- the Environment Centre (tEC), an environmental NGO from South East England, UK
- Stichting Brabantse Milieufederatie (BMF), an independent NGO from Noord Brabant, the Netherlands
- Universidad de Sevilla, Andalucía, Spain
- ACER Reggio Emilia, a social housing operator in the Province of Emilia Romagna, Italy
- Region Gotland, a public body from Sweden
- Viimsi Vallavalitsus, a rural public body from Estonia

The partnership explored good practices for behaviour change, community engagement, energy efficiency and CO₂ reduction across the project regions. Knowledge was exchanged through study tours, interregional events and local, regional, national and international working partnerships. This learning shaped the delivery of community engagement activities across the partnership.

This report showcases the good practices identified in the partner regions; it is a report of practical initiatives and techniques which aims to inform and inspire those looking to undertake community engagement activities. However, it is important to note that this document does not represent an in-depth investigation into behaviour change theory (although we have made reference to a number of important publications for further reading).

Whilst the report focuses on the project partner regions we feel that there is good scope for transferability across the EU not only due to the geographical, political and socio-economic diversity of the partnership; but also because of the wide variety of initiatives undertaken.

As a result of the activities undertaken throughout the project and wider reading on the subject, the partnership has formulated a series of recommendations for the effective delivery of community engagement initiatives aimed at promoting low carbon living. These recommendations are explored in chapter six.

Behaviour Change

Behaviour change initiatives are widely seen as an invaluable tool for cutting emissions, with distinct advantages over purely legislative interventions:

- they can be highly cost-effective
- they can provide savings and other benefits directly to citizens

1 Since 2007, several UK initiatives have been run under the 'Act on CO₂' brand combining provision of information with persuasive advertising.

2 The term 'island' refers to communities of distinct characteristics at different stages of engagement in the climate change agenda.

- the benefits can be very fast, unlike major infrastructure changes that can take years or even decades³

In recognition of this, attempts to change individual and group behaviour have been increasingly incorporated in governments' initiatives on climate change. However this has proved to be a complex challenge; not least because there is strong evidence to suggest that individuals do not always behave in a rational manner:

Although many energy efficiency measures have been proven to be highly cost-effective (for example insulating a loft or putting in place cavity wall insulation), and therefore a 'rational' thing to do, many people are yet to introduce them⁴.

A sound understanding of the factors shaping behaviour should form the cornerstone of any engagement initiative aimed at changing attitudes and behaviours. For those seeking further information on the relationship between behavioural theory, models and community engagement we recommend the following publications:

- DEFRA: *A Framework for Pro-Environmental Behaviours*, January 2008, www.defra.gov.uk
- *MINDSPACE: Influencing behaviour through public policy*, Cabinet Office and Institute for Government, www.instituteforgovernment.org.uk
- GSR Behaviour Change Knowledge Review, Practical Guide: An Overview of Behaviour Change Models and their Uses, 2008, www.gsr.gov.uk
- *Shaping Our Future*, Joint Ministerial Third Sector Task Force on climate change, the environment and sustainable development, HM Government, 2010
- *Working with Communities to Tackle Climate Change: Practical approaches for local government*, NESTA, April 2010 www.nesta.org.uk
- *Climate Change: Engagement and Behaviour*, Parliamentary Office of Science and Technology Note (POSTNote) Number: 347, January 2010

Alongside an understanding of the factors affecting behaviour we feel that it is very important that any individual or organisation looking to influence low carbon behaviours consider examples of successful initiatives. TrIsCo aims to provide this resource by showcasing good practice examples—of initiatives, tools or techniques— from across the partner regions.

This catalogue is formed of six sections. The profiles in chapter one, provide a brief insight into the diverse partners and regions involved in the project.

Chapter two outlines the key activities undertaken in the partner regions in order to identify and promote good practices.

Chapter three contains a matrix outlining the good practices identified through the project. This matrix is designed to enable the reader to identify the practices most relevant to them, at a glance. Detailed descriptions of all good practices can be found in annex 1.

Chapter four will look at these good practices in more details with a review focusing on applicability across the project region.

Chapter five set outs the partnership's recommendations for policy-makers and delivery of effective engagement and behavioural change initiatives to deliver low carbon economies.

Chapter six draws together the conclusions of our project.

3. Cabinet Office Behavioural Insights Team, *Behaviour Change and Energy Use*, July 2011, pgs. 2-6

4. Ibid., Introduction.



1. The TrIsCo Partnership and Regional Profiles

The TrIsCo Partnership

[The Environment Centre \(tEC\)](#) is an independent NGO with almost 20 years' experience in addressing environmental and sustainability issues. Based in Southampton, England tEC works with Local Authorities, businesses, community groups and educational bodies across Hampshire, the Isle of Wight and West Sussex.

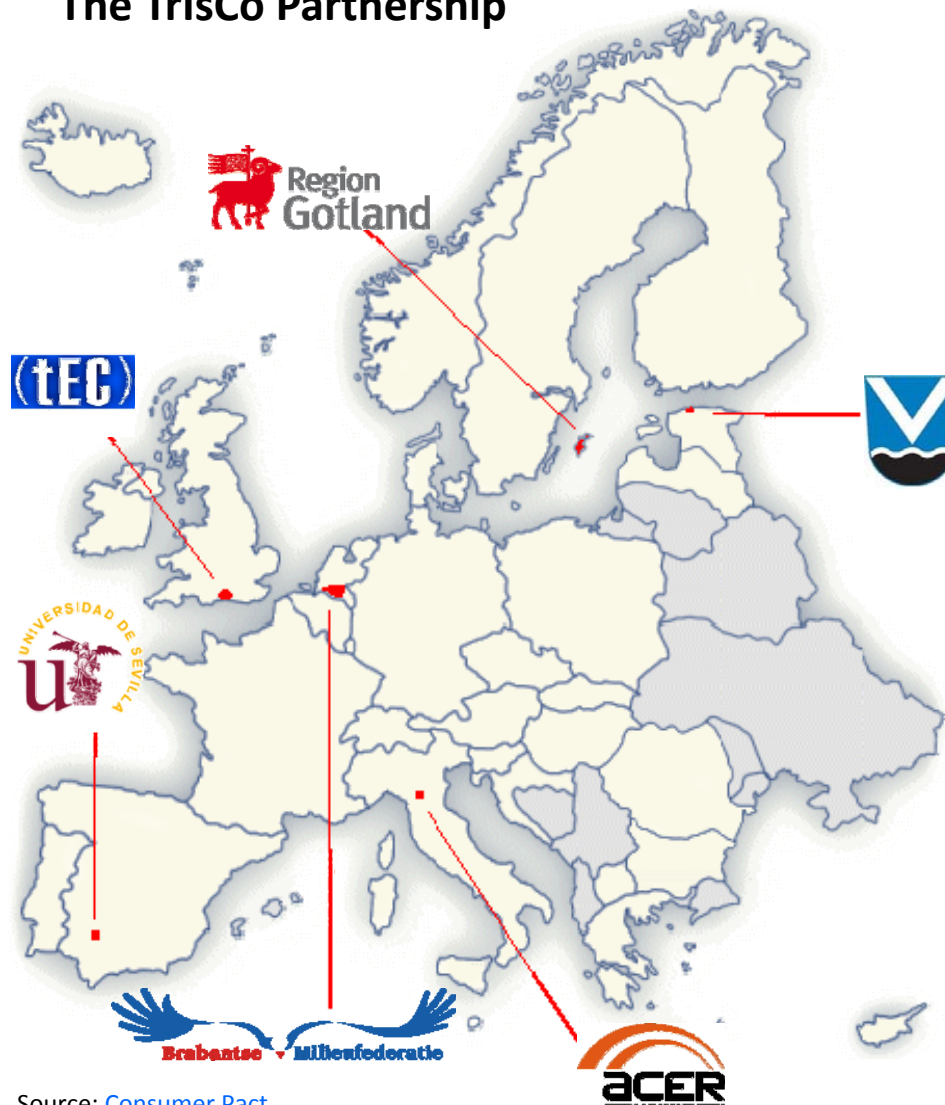
tEC undertakes a variety of projects focusing on all levels of sustainability including: energy, waste, water, transport, construction, education and local food.

[Brabantse Milieufederatie \(BMF\)](#) is an NGO that strives for a healthy environment, vital nature and a varied landscape for all inhabitants in the province of Noord Brabant, The Netherlands. BMF works with 115 affiliated nature and environmental organisations, supporting them with access to relevant networks and knowledge.

BMF influences policy on a local and regional level by offering solid, independent and constructive advice or information. At the same time BMF initiates and participates in (pilot) projects that contribute to sustainability in Noord Brabant.

The [University of Seville \(UoS\)](#) is the main public teaching and research institution in Andalusia with 60,000 students and 4,500 teachers. The UoS consists of more than 400 research groups, with nearly 7,500 scientific publications a year.

The UoS representatives working on TrIsCo are from the Schools of Architecture and Building Engineering. They are also members of the research group ARDITEC which focuses on sustainable construction, renewable energy installations in buildings, construction waste management and , recycled building materials.



Source: [Consumer Pact](#)

[Viimsi Vallavalitsus](#) is a rural municipality in Northern Estonia which borders the capital Tallinn. Re-established in December 1990, the municipality provides the following key public services:

- healthcare, education, child and elderly care;
- building and maintenance of public roads and properties, parks and beaches;
- regulating planning and building
- environmental and waste management
- promoting cultural and sporting life

[Region Gotland](#) (formally Gotland Municipality) was founded in 1971 after a merger of several small municipalities on the island of Gotland, Sweden. The region is responsible for key services including public schools, health, child and elderly care, public transport, water, sewage and waste Infrastructure.

Gotland has set itself the challenge of achieving a climate neutral energy supply by 2025. Offering the highest possible efficiency and economy, the supply will be based on local, renewable resources and will contribute to local growth. Since 1995 the region has reduced CO₂ emissions (linked to fossil fuels) of its own operations by 50%.

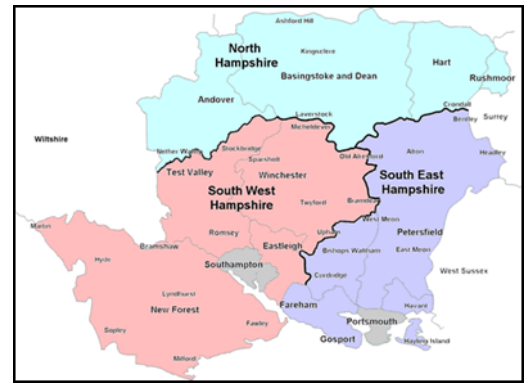
[ACER \(Azienda Casa Emilia Romagna\) Reggio Emilia](#) is a social housing organisation responsible for building and managing local authority housing stock in Reggio Emilia, Italy. ACER's key priority is to assist its tenants to live sustainably by searching for the best available solutions.

ACER is a leading figure in the development of regional housing policies and is an active member of FEDERCASA, the Italian national network of social housing organization and the European energy expert network CECODHAS.

Hampshire, UK

Hampshire sits in the centre of England's southern coast, and is generally characterised by two landscapes: chalk downlands to the north and the lowland clays, sands and gravels to the south (which support rare heath and woodland habitats).

Hampshire has a total area of 3,700 km² and a population of around 1.74 million. 77% of the population lives in urban regions, which accounts for only 15% of the total land area⁵. Hampshire is home to two national parks (within the New Forest and South Downs) which cover approximately 45% of the county.



Source: [Business Services](#)

Hampshire is a relatively affluent county with highest employment in:

- Public Administration & Defence, Health & Education
- Business, Financial and Professional Services
- Wholesale, Retail, Accommodation & Food Services⁶

The county is also home to two of England's largest ports: Southampton, which handles a large proportion of the UK's container freight and Portsmouth which supports a large Royal Navy base.



Source: [Coffee Shop](#)

Noord Brabant, The Netherlands

Noord Brabant is the second largest of the Dutch provinces and takes in the whole of the southern part of the Netherlands, with the exception of a narrow strip in the east which belongs to Limburg. Total area is more than 500km².

Like most of the Netherlands, Noord Brabant is mostly flat. While most of the population lives in urban areas (around 60%), the province is scattered with villages and most of the

land is cultivated, although forests, heathlands and dune areas still can be found as well. Noord Brabant is one of the most populated Dutch provinces (almost 2.5 million people), with big cities like Eindhoven, Breda, Tilburg and Den Bosch.

Noord Brabant is considered a vital area for the Dutch economy. Employment is found in the agricultural, industrial and service sectors. To strengthen its (international) competitive position, Noord Brabant is investing in knowledge based economy and aims to be one of Europe's top innovative regions. Research has shown that within the region there are opportunities in the field of sustainable energy technology like solar-pv, bio-based economy and electrical transport & smartgrids.

Andalusia, Spain

Andalusia is located in the south of the Iberian peninsula and has the largest population in the region (over 8.25 million inhabitants in 2009). In terms of land area, Andalusia is the second largest of the seventeen autonomous regions in Spain. Seville is the region's largest city and capital. The region has a rich history and a strong cultural identity.



Source: [Spanish Fiestas](#)

5. Sources: Data are derived from 2001 Census data; Population figures - Hampshire County Council small area population forecasts, 2008; Rural urban figures-Rural & Urban Classification 2004

6. Business Register and Employment Survey 2008 and 2009

Since the Industrial Revolution, Andalusia has been an economically poor region in comparison with the rest of Spain and the European Union at large. However, the growth of the community, especially in the sectors of industry and services, is above average in Spain and higher than many communities in the euro-zone.



Reggio Emilia, Emilia-Romagna, Italy

The Province of Reggio Emilia, located at the heart of the Emilia-Romagna region, is home to 450,000 people. The landscape is diverse: from the vast lowlands in the north to the Apennine Mountains in the south. The province covers a 2,292 Km² (10.4% of the Emilia Romagna region), with 45 municipalities divided into 6 districts.

Source: [Europa](#)

The Province of Reggio Emilia represents one of the main centres for Italian economy. Similar to the rest of the Emilia-Romagna region, the province is characterised by the presence of industrial districts which are separated by sectors.

The production of agricultural machinery (of which Reggio Emilia is a world leader) is a prominent industry within Reggio Emilia; however, construction, agriculture, food and textiles industries also play an important role in the local economy, employing more than 70% of the local workforce.

Viimsi, Estonia

Viimsi, (located next to the Estonia's capital Tallinn) is a peninsula with 15 islands, of which only two are populated: Naissaar (7), Prangli (145). Viimsi has a total area of 72.9 km² of which 47 km² is mainland (64.4%) and 26 km² islands (35.6%). The region has a total population of 16,993 (April 2011). There are two main centres of population Viimsi (2,395 inhabitants) and Haabneeme (5,030 inhabitants).

Viimsi has seven ports including Estonia's largest commercial port, Muuga. It also has a number of protected areas: Naissaar island is a designated Nature Park; Mäealuse (on the mainland), Prangli and Aksi islands are landscape protection areas.



Source: [Embassy World](#)

Key Facts - Prangli

Size: 6.44 km²

Population 145

Key industries: fishing, tourism

Electricity production is from a diesel generator (upgraded in 2010)

The island has a Kindergarten and primary school. Relief is flat with the majority of the island only two or three metres above sea level. The west of the island is rocky with the eastern part mostly covered with sand and sand walls.

Key Facts - Naissaar

Size: 18.6 km²

Population 7

Key industries: tourism

Electricity production is from small privately owned diesel generators and solar batteries.

The island has an interesting military history and is now a nature reserve. The island is quite flat and has been formed by sand dunes. The middle of the island is dominated by forest (90%) mainly pine.



Copyright: Region Gotland

Gotland, Sweden

Gotland is the largest island in the Baltic Sea and is located approximately 60 miles off the southeast coast of mainland Sweden. 57,000 people live on the island year round although this figure increases dramatically in the summer as Gotland is one of Sweden's most popular holiday destinations. Tourism, agriculture and food production are the region's main industries.

Local renewable energy is a growing business sector, which currently meets 20% of the island's energy demand. Northern Europe's largest cement factory (an ETS-plant) is located on the island; this alone accounts for 50% of the

island's total energy demand.

Gotland has set itself the challenge of having a climate-neutral energy supply by 2025. The island is a showcase for a number of interesting and innovative renewable energy initiatives as Gotland enjoys Sweden's highest sunshine figures, good access to bio-fuels and is one of the best European locations for wind power.

Since 1995, the municipality has reduced CO₂ emissions from fossil fuels in its own operations by almost 50%. On the island as a whole, fuel production and local energy supply from renewable resources are both increasing. Local wind power meets 25% of the island's annual electricity demand. Biofuels from local forestry supply the domestic heating. 2010 saw the building of the island's first biogas fuel station for cars and buses.



2. Activities



Through the TrIsCo project, partners have engaged with a wide variety of communities each at different levels of involvement in the climate change debate. These engagement activities have been wide-ranging and diverse: from simple home visits to discuss energy efficiency to national competitions aimed at encouraging pro-environmental behaviours.

This chapter summarises the range of activities undertaken by the partnership. For the purposes of this catalogue these have been grouped into key themes:

- Defining community character
- Measuring Energy Use
- Education Programmes
- Training Programmes
- Community Engagement
- Knowledge exchange & Policy influence

It is from these core activities that the partnership has identified good practices. A more detailed examination of these good practices can be found in Appendix 1.

Defining community character

In the early stages of the project partners undertook research to identify and profile their communities. Activities ranged from carrying out simple desk-based studies to detailed stakeholder analysis. In this way audiences were identified and engagement strategies drawn up.

As part of the [Low Carbon Communities Challenge](#) initiative in Whitehill-Bordon Eco-Town (East Hampshire) **the Environment Centre** sat on the Delivery Board which undertook a comprehensive stakeholder analysis overseen by a professional facilitator. As a result of this exercise, potential partners were identified, links were made to existing initiatives and a detailed engagement strategy was developed.

Viimsi Vallavalitsus identified that some of its island communities needed more comprehensive support due to their historic mistrust of outsiders. Viimsi staff conducted a series of engagement activities which initially targeted prominent community members to build trust. This was followed up by a series of home visits and meetings with village societies.

Measuring Energy Use

Research into energy saving behaviour has shown that people want to know what the real impact of their investment or actions are. Therefore it is important to be able to baseline and measure energy consumption to demonstrate and promote savings and successes to the wider community and retain the interest of those involved. This corresponds with a key finding from NESTA's Big Green Challenge: *Monitoring is [also] about providing good feedback around the impact of community activities. This is crucial in maintaining enthusiasm and motivation amongst community members*⁷

tEC piloted an *energy monitor loan scheme* for households across Hampshire. Energy monitors enabled participants to easily measure their real time energy usage. These monitors show how much electricity is being used, how much it is costing and how much CO₂ is being generated. The scheme has been very successful in raising awareness of energy use in the home and has had clear advantages over a one-way communication campaign.

7. National Endowment for Science, Technology and the Arts (NESTA), *Working with Communities to Tackle Climate Change: Practical approaches for local government*, April 2010, pg. 16 www.nesta.org.uk

ACER Reggio Emilia initiated the Condomini Virtuosi project based on the premise that citizens must understand their use of energy and behaviour in and the home to effectively reduce their CO₂ emissions. A key stage in the project was calculating the carbon footprint of residents' apartments using the simple CO₂ assessment tool questionnaire.

Development of a simple CO₂ assessment tool

Under the leadership of the **University of Seville** (technical partner for TrIsCo) the partnership has developed a Simple Energy Assessment Tool aimed at enabling individuals to calculate the energy efficiency of their home. As well as calculating CO₂ emissions, the tool suggests energy saving measures that can be implemented. In a similar way to the energy monitor loan scheme, this tool engages participants by base-lining their current energy demand.

The 'Simple CO₂ Assessment Tool' good practice summarising the key stages of the tool's development can be found in Annex 1. pg. 63

Education Programmes

Education programmes have been developed by the Dutch, English and Estonian partners. The University of Seville has also involved its Building and Engineering students in the TrIsCo project through their Sustainable Construction module.

BMF developed a three tiered training programme on sustainable energy for primary school children, involving secondary school students and students from a higher professional education.

The secondary school students acted as 'Teachers for the Day' at the primary school De Klimop in Haaren. They taught 8-10 year old children about energy use, energy reduction and the sources of sustainable energy. To ensure the secondary school students had appropriate knowledge about teaching and the subject matter, they received two days of training, developed by students from the Fontys Teacher Training Institute (FLOT) in Tilburg. The first day focused on traditional teaching techniques; the second day focused on various forms of sustainable energy and ways of imparting this knowledge to the children.

For the secondary school students the education project was part of their extracurricular internship in the workplace, which in the Netherlands is considered important for the completion of a modern secondary school education. The FLOT students' involvement in the programme—developing and executing the training — formed part of a sustainability orientation project.

The initiative was considered a great success not only because all involved were enthusiastic and engaged, but also because this initiative managed to establish a cohesive and mutually beneficial link between education and existing activities in society.



Explaining an assignment



Making a lemon battery for a LED light

tEC has built upon its environmental education programmes by developing new and interactive materials, activities and lesson plans which have been linked to existing initiatives within communities; bringing relevance and a local dimension to the students' learning.

As part of a Portsmouth City Council led retrofit and community engagement initiative—Jubilee Eco Terrace— interactive display boards were produced to showcase retrofit measures and introduce the themes of sustainable living: water conservation, local food, transport, waste and recycling, energy efficiency and renewable energy. tEC worked with two local schools, presenting a variety of workshops on energy saving in the home where they used the display boards to relate interventions to the local retrofit home (only 10 minutes walk away).

Viimsi developed a programme for students on the island of Prangli and Püünsi (on the mainland) which focused on:

- Water conservation in and around the home – kitchen, bathroom, garden
- Energy conservation – saving electricity; saving and collecting heat
- Waste reduction and segregation

Students were led in a discussion about practices in their home and the improvements they could make. Many of the students commented that they would discuss this further with their families.

The **University of Seville** has recently embarked upon a new Building and Engineering degree course and identified the opportunity to incorporate a sustainable construction module into the curriculum. The TrIsCo project presented practical examples and case studies for the students. As part of the Sustainable Construction module they undertook a range of activities including:

- Participating in study tours in the Andalusian region
- Assisting in the development of a simple CO₂ assessment tool
- Researching good practices, policies and initiatives for energy efficiency across Europe
- Analysis of case studies from TrIsCo partner regions
- Feasibility study: renewable energy options for Viimsi Rural Municipality, Estonia

Training Programmes

Against a back drop of limited resources for community engagement, training programmes have been found to be an excellent and cost effective way of raising awareness, building confidence and cascading this knowledge throughout communities. Done well, the training of key individuals within groups or organisations can result a significant returns on that investment.

KlimaTeams, a project developed by **BMF**, aimed to stimulate awareness on energy and energy saving measures for immigrant populations in two major cities in North Brabant: Breda and Eindhoven. The project had two main components:

- I. A train-the-trainer course, where people within an immigrant community were trained to become a KlimaTeam coach. The potential coaches received information on energy efficiency measures, then learnt presentation and coaching skills.
- II. The coaches formed KlimaTeams of 8 to 10 immigrants within their own networks. Each KlimaTeam coach organised three sessions in which they passed on what they had learnt. The sessions were designed to be interactive to stimulate dialogue between team members.

tEC identified the potential for front line staff to provide a link between tEC's energy advisors and people who may be suffering from fuel poverty. As a result, tEC developed a training programme targeted at staff and volunteers who as part of their daily work would be likely to visit residents in their homes, or

who would otherwise come into contact with potentially fuel poor residents. The aim of the training was to equip these staff with the knowledge to be able to identify someone who may be fuel poor and subsequently signpost them to an appropriate source of help.

Community Engagement

Whilst community engagement includes elements from all the activities above, this section focuses on the wider initiatives undertaken by the partnership.

Climate Street Parties – a national competition based initiative developed by HIER Klimatbureau and managed by **BMF** in the Noord Brabant region. The initiative encourages people to reduce their CO₂ emissions and alter their behaviour. It promotes community spirit and emphasises the need for direct community action. It is backed by a number of national and local organisations and businesses.



Potential participants register at www.klimaatstraatfeest.nl and points are awarded to individuals for:

- taking energy saving actions in their home
- taking energy saving actions with their neighbours
- recruiting new participants.

The top 500 streets win a party package where each participating address receives €25 in food coupons to put towards a party. The best street wins a fully organised 'Super Street Party' including a fully catered BBQ and a performance by a famous Dutch artist.

In 2009-2010 (the competition's second year) over 12,000 people took part across the Netherlands (2,193 in Noord Brabant). This event was seen as a great success not only because it promotes community cohesion through community led actions but also because of its fun and interactive approach to encourage people to reduce CO₂ emissions and change their behaviour.

Eco Day is an annual event organised by **Region Gotland** to inspire all inhabitants on Gotland to live in an environmentally and climate-friendly way. Focusing on solutions from Gotland the theme for 2010 was energy and energy optimisation. The day was divided into an afternoon and evening session: the former for municipal employees and university students; the latter for the general public.

The programme featured an inspiring high profile key note speaker and two panel debates: the first focused on the position of the two dominant energy sources on the land:

wind power and bioenergy, and what the municipality could do to facilitate the switch to renewable energy; the second on how the switch to renewable energy will affect everyday life on Gotland.



Viimsi Vallavalitsus identified the need to inform members of their co-operative housing associations about energy saving measures, environmentally friendly behaviour and renewable energy production; inspiring them to take action. Working in partnership with the National Union of Co-operative Housing Associations, Viimsi investigated the concerns of local CHAs and offered them training and advice regarding refurbishing and retrofitting buildings.

In addition to this Viimsi approached the Estonian Technical University to deliver a presentation focused on cost-effective renovation techniques and different technologies and materials suitable for local needs

at the National Union of Co-operative Housing Associations Conference in Tartu (19/02/2011).

A *Solar and Biomass Heating Fair* was arranged by **Region Gotland** in an effort to:

- Promote the transition from fossil fuel heating systems to renewable energy solutions
- Encourage increased uptake by residents
- Inspire local businesses to take advantage of potential market growth

Businesses within the solar and biomass heating supply chain became actively involved in developing the programme and created a local entrepreneurs network. A recognised expert in the field of solar and biofuel heating systems attended the fair; delivering a training seminar for the businesses and promoting the technologies to the wider public. 23 businesses exhibited their products (10 mainland suppliers, 13 local bio-energy and solar energy entrepreneurs).



The *Night of the Night* (www.laathetdonkerdonker.nl) is a national event focused on the importance of darkness for nature and (un)nessessary energy use for lighting purposes. It is coordinated at a provincial level. In Noord Brabant **BMF** worked with the municipality of Den Bosch, one of the five largest cities in Noord Brabant. Together with guides from local nature preservation organisations a night time walk was organised in 'Bossche Broek', a unique protected natural area right at the edge of the town to show visitors the beauty of the night. Halfway through the walk part of the city lights in Den Bosch were turned off to show the impact of street lights and decorative lighting and to raise the question if all this lighting is necessary.

Knowledge Exchange and Policy Influence

All partners have hosted an interregional event and study tours to showcase good practice, share knowledge and discuss issues within their regions. Not only were these events attended by the TrIsCo partners, but also by national, regional and local stakeholders. These study tours and interregional events were invaluable in terms of the exchange of ideas, experience and inspiration as well as the networks and connections made. For instance:

- Viimsi and Tallinn City Government staff visited Gotland in September 2011 to learn more about the innovative renewable energy initiatives on the island and how these could be applied to their region. This visit was a direct result of the work achieved through TrIsCo and the Viimsi and Gotland study tours.
- The night-time nature walk element of the Night of the Night initiative has been adopted by the Whitehill Bordon Eco Town team who are looking to host a similar event in October 2011.
- **tEC** has worked in partnership with various local authorities and organisations on a variety of community engagement initiatives including: East Hampshire District Council, Portsmouth City Council, Environment Agency, Groundwork Solent, Radian, WinACC, Transition Southampton.

Whitehill Bordon Eco-town

Eco Town and Low Carbon Community Challenge are two key initiatives instigated by the UK national government (the former managed by the Department of Communities and Local Government; the latter under the Department of Energy and Climate Change). Whitehill Bordon was awarded Eco-town status in

July 2009 and secured LCCC money in January 2010.

The LCCC initiative was designed to deliver interest free loans of up to £10,000 for retrofit measures to a number of homes in Whitehill Bordon. tEC was involved from the beginning of the project as a member of the delivery board and as well as delivering community engagement activities through the TrIsCo project. These included: promoting the Eco-fit loan via its free phone advice line, school education visits to Weyford and Bordon Junior Schools; attendance at local consultation and community events and delivery of an energy monitor loan scheme.

Jubilee Eco Terrace, Southsea, Portsmouth

Portsmouth City Council undertook a pilot retrofit initiative—Jubilee Eco Terrace— in an effort to improve the environmental performance of a council-owned property. The council owned house was used to showcase retrofit techniques and technologies to local residents, professional staff and building contractors. This work is in line with the council's commitment to the UK government's Warm Homes Greener Homes strategy which focuses on improving the environmental performance of existing housing, within a context which addresses other sustainability issues.

tEC formed part of the Southsea Retrofit Initiative Management Group (alongside Portsmouth City Council and the Environment Agency) which steered and delivered numerous activities under the Jubilee Eco Terrace brand. These included:

- open house days to showcase the measures carried out
- a business event for local contractors and suppliers focusing on opportunities in the emerging retrofit and renewable sectors
- educational visits with local schools focusing on sustainability in and around the home
- Home visits offering tailored advice to local residents

The island of Gotland has set itself the challenge of having a climate neutral energy supply by 2025. Gotland is a showcase for various interesting and innovative renewable energy initiatives. As such, **Region Gotland** is considered the exemplar partner within the TrIsCo project due its impressive track record and its efforts to become a truly sustainable island community.

Key to Gotland's success is the longstanding political commitment to innovative sustainable policies coupled with public engagement and ownership of renewable energy solutions. The table overleaf, summarises important milestones in Gotland's journey from the 1980s to the present day.

A key element of Gotland's continuing transition to a climate neutral energy supply has been the development of the municipality's **Energy Plan**. This plan is based on the vision of the entire island contributing to a sustainable community and specifically to the municipality's aims and targets for ecologically sustainable development.

The dependence on fossil fuel energy and nuclear power will be phased out through more efficient energy consumption, as well as through increased use of long-term, sustainable energy sources. Access to renewable and recycled energy will be developed locally. Within the framework for economically and socially sustainable development, the energy resources must be able to balance the island's energy requirement for transport, heating and electricity. For more information or to view the Energy Plan (2007-2010) visit: www.gotland.se/eco

Region Gotland: A brief history of public engagement and policy decisions to encourage low carbon lifestyles

- ⇒ Local awareness that has led to the early development of wind power on Gotland and involved many local households (since the 1980s)
- ⇒ Early local public awareness on waste and recycling and the municipality's commitment to addressing waste (since 1990s). A second generation of waste and recycling facilities are under construction 2010-2012
- ⇒ Local political commitment on the transition to renewable energy (since 1992)
- ⇒ Participation in national funding programs and EU projects either independently or with local SMEs or other public bodies (since 1995)
- ⇒ Municipal decisions to replace fossil fuel heating with renewable alternatives and the public procurement of green electricity (Since 1996 – almost completed in 2011)
- ⇒ National and local media reporting on climate change issues (peak during 2007)
- ⇒ Engaged SME's who invest and develop renewable energy solutions in various areas (for example local exhibitors at the Solar and Biomass Heating Fair)
- ⇒ Municipal decisions on using less fossil fuel in the transport system – creating a local market for bio fuels (RME 1996, Biogas 2010)
- ⇒ Various activities to encourage a transition towards energy efficiency and renewable or recycled energy supply: Eco Day 2010, SME workshops or seminars, Municipal energy advisory service
- ⇒ Promoting good examples of low carbon living to the general public: Eco Day, Environmental calendar, study tours, web pages

ACER was actively involved in the development of the 2010 *Regional Law (DAL 1362/2010)*. This legislation builds on *Regional LAW DAL 156/2008* which is concerned with energy efficiency and certification guidelines for buildings in Emilia Romagna. The new law outlines the region's transition towards legislation on energy performance of buildings. ACER was well placed to influence local and regional law not only due to its membership of CECHODAS and FEDERCASA, but also through its experience of working under the legislation.

An amendment has been made to the recent *Estonian District Heating Law (01/11/2010)*, allowing for the use of renewable energy heating systems in district heating areas, which was previously prohibited. **Viimsi Vallavalitsus** has had several meetings with the Green Party in the Estonian parliament to investigate ways of making this happen in the region.

National Fuel Poverty Strategy (UK)

Britain's old and inefficient housing stock not only gives rise to 27% of the UK's total CO₂ emissions, it is also a significant contributing factor to the high incidence of fuel poverty in the UK. In October 2010, the UK Government announced it would commission an independent review of its fuel poverty policy to take a fresh look at the issue in order to focus its available resources more effectively. Subsequently the Hills Review launched a call for evidence.

tEC submitted a series of recommendations based on its experiences of delivering a programme of fuel poverty outreach work throughout Hampshire, the Isle of Wight and West Sussex and complementary work undertaken through TrIsCo. tEC's recommendations include:

- Training programmes for front line staff should receive continued funding. They provide a valuable opportunity to raise awareness of fuel poverty amongst relevant workers – this addresses a significant knowledge gap.
- Partnership working with other trusted agencies is an essential component to ensure that help can be targeted *and* delivered effectively.

- Hampshire County Council's Trigger Tool database (which includes tEC's free phone advice line number) is available for staff and volunteers who visit older people in their homes. This enables them to signpost clients to other agencies for help. This has been an effective way of identifying and targeting vulnerable people and providing them with fuel poverty assistance.
- A commonly recognised barrier to the uptake of loft insulation is an individual's inability to clear belongings from the loft space (particularly amongst older people and/or those suffering from ill health or disability). To address this tEC initiated a small pilot project in conjunction with Eastleigh Borough Council and the Wheatsheaf Trust charity, which offered elderly residents loft insulation combined with a loft clearance service. This resulted in an additional 25 vulnerable households being helped. We would recommend that finance is made available for similar initiatives.



3. Good Practices



The partnership identified a total of 32 good practices through their research and the delivery of engagement activities during the TrIsCo project. We defined a good practice as a tool, technique or interventions aimed at changing behaviour and reducing CO₂ emissions, which is considered successful, cost effective and easily replicable.

The matrix, overleaf outlines the good practices identified by region and highlights the aims, objectives, target groups and results of these practices. This matrix is designed to enable the reader to identify the practices most relevant to them, at a glance. Detailed descriptions of all good practices can be found in Annex 1.

Title and Aim	Objective/s	Location	Target Group/s	Results
Bite Size Training Aim: Delivery of key sustainability messages and information in a concise and simple manner Annex 1 pg. 3	To develop short information sessions to help residents find out how they can reduce their energy use and fuel bills, in a practical and informal way	Hampshire, UK	- The general public - Community champions	8 community champions received training - An increased demand in these training sessions across Hampshire - very positive feedback from participants
Free Phone Advice Line Aim: Overcoming barriers to the uptake of energy efficiency measures by the provision of free and impartial advice on energy efficiency and sustainability issues Annex 1 pg. 6	- Provision of a free phone advice line covering a range of sustainability issues including energy efficiency and renewable energy options for the home - Signposting individuals or groups to grants, loans and other organisations for assistance - Assisting individuals and groups in accessing discounted/ free insulation and exploring renewable energy options	South East England, UK	The general public	- Total number of enquiries - 1,466 - Number of installations (loft and cavity wall: 182 (loft), 160 (wall), 79 (both)) - One 3.04 kW Mono Crystalline PV system installed - total CO₂ savings - 308.53 tCO₂ per annum
Energy Monitor Loan Scheme Aim: Empowering homeowners to reduce energy consumption in the home through the use of real time data Annex 1 pg. 10	- To increase homeowners' awareness of energy use in the home - To reduce electricity 'waste', CO₂ emissions and utility bills - To allow homeowners to see which appliances and devices use the most energy and see the effects of switching these off	Hampshire, UK	- Homeowners - The general public	50 individuals took part
Front Line Staff Training Aim: Addressing a lack of knowledge on fuel poverty issues amongst front line staff Annex 1 pg. 13	- Training and advising front line staff to recognise the signs of fuel poverty and know how to take action. - Encouraging staff to disseminate this knowledge to their peers.	Hampshire, UK	'Front line' Staff: - Local authorities - Trading Standards - Citizens Advice Bureau - Handyperson service - Home Improvement Agencies	58 members of staff attended the training sessions. - An additional 169 front line staff were reached by the attendees sharing their knowledge

Title and Aim	Objective/s	Location	Target Group/s	Results
Open House Days: showcasing an exemplar retrofit home Aim: Demonstrating practical examples of retrofit techniques and technologies in a 'normal' home Annex 1 pg. 16	• Showcasing best practice in renovating a typical property in the area • Promoting the social, economic and environmental benefits of retrofit work	Southsea, Portsmouth, Hampshire, UK	• Local residents • Local authority staff • Suppliers • Contractors	• Over 250 people visited the house • Feedback from attendees was positive • Portsmouth City Council is currently developing a second phase to this work
School Education Programmes Aim: Equipping young people with the skills and knowledge to be able to adapt to a changing environment Annex 1 pg. 19	• To develop and deliver school education programmes focusing on energy, sustainability and environmental issues • Increasing children's understanding of and concern for the environment • Encouraging students to develop environmentally friendly lifestyles as they grow older • Encouraging students to share this information with their families and the wider community	Hampshire, Isle of Wight, West Sussex, UK	• School children (5 to 11 years)	• 502 children took part in the school programmes • Positive feedback from students and teachers
Interactive resources for communicating sustainability messages Aim: Engaging with individuals to encourage a reduction in CO₂ emissions through the use of interactive resources Annex 1 pg. 24	• Communicating sustainability messages in interesting and fun ways • Relating sustainability issues and actions to an individual's daily activities	Hampshire, UK	• The general public	• An increased interest in exhibits at events • Better interaction with children at school events
SME Seminar Aim: Addressing a lack of knowledge of local opportunities in emerging retrofit and renewable energy markets Annex 1 pg. 29	• Raising awareness amongst local suppliers, contractors and trades people of businesses opportunities in retrofit and renewables • Encouraging a discussion on the drivers and barriers to expanding services offered • Networking between local training providers, local municipalities, local contractors and suppliers	Portsmouth, Hampshire, UK	• Tradespeople • Suppliers • Building contractors	• 16 staff from 13 businesses involved • The discussion provided insight to the SMEs' thoughts on retrofit and renewable technology opportunities

Title and Aim	Objective/s	Location	Target Group/s	Results
Shop Visits: offering sustainability advice and support Aim: Engaging with small retail outlets with little capacity to attend information seminars Annex 1 pg. 32	- To provide bespoke advice to local SMEs on sustainability at their place of work - To signpost these businesses to grants, loans and other support available	Southampton, Hampshire, UK	- SMEs - Retail micro businesses	17 businesses were engaged 20 'Top Tips' brochures were distributed within the village centre
SME Environmental Performance Review Aim: Assisting SMEs to improve their environmental performance Annex 1 pg. 34	- Assessment of the environmental sustainability of an organisation and its activities - Advice on practical improvements to premises and operations to improve the environmental performance of the SME - To increase staff members' awareness of environmental issues, energy and resource use in their workplace	Hampshire, UK	SMEs	No and low cost interventions including behaviour change measures.
Climate Street Party competition Aim: Coordinating a nationwide competition to encourage collective action to save energy and reduce CO ₂ emissions Annex 1 pg. 36	- To make the general public more conscious about their energy consumption and how CO₂ emissions effect the environment - To stimulate people to take action both individually and as part of a community - Providing incentives to overcome habitual behaviour	Noord Brabant The Netherlands	The general public	2,193 households in Noord Brabant participated, forming 48 street networks (an average of 12.5 households per network)
Energy Cafés Aim: Provision of a forum to explore themes of energy efficiency and carbon reduction Annex 1 pg. 43	- Increase energy awareness - To increase knowledge of technical solutions and practical actions to save energy - To provide access to expert advice in an informal setting	Noord Brabant The Netherlands,	The general public	5 Energy Cafés were organised: ⇒ 3 in cooperation with Climate Street Party participants (50 attendees) ⇒ 2 with local municipalities (60 attendees, 5 businesses)

Title and Aim	Objective/s	Location	Target Group/s	Results
Golden Star Municipalities Aim: Encouraging engagement between local authorities and citizens on climate change issues Annex 1 pg. 47	• To increase the visibility of existing local authorities' climate initiatives • To boost local climate policies and initiatives • To stimulate active involvement of local authorities in the Climate Street Party competition (CSP), by providing easy-to-use tools	Noord Brabant The Netherlands	• Municipalities • Citizens	• 13 municipalities participated • municipalities valued the opportunity to access the contact details of active citizens • 85% of respondents hosted an Energy Café • 80% of respondents said they would participate in future CSP competitions
KlimaTeams Aim: Increasing awareness on energy and energy saving measures amongst 'hard to reach' immigrant populations Annex 1 pg. 52	• Raising awareness about energy use and energy reduction • Offering immigrant populations practical assistance with implementing energy saving measures in the home	Breda and Eindhoven Noord Brabant The Netherlands	• Dutch immigrants	• The project involved 7 coaches from Iran, Ghana, Morocco, Aruba, Sierra Leone and Congo • 56 members participated in the KlimaTeam meetings • the project reached an additional 392 citizens through a cascade of knowledge within the community.
Night of the Night Aim: Stimulating awareness on saving energy, light pollution and CO ₂ reduction Annex 1 pg. 55	• Raising awareness on (un)necessary energy use • Emphasising the importance of darkness for nature	Noord Brabant the Netherlands	• The general public • Local businesses • Municipalities	• 20 activities were organised, attracting approximately 5,500 visitors • Guided night-time walks in several natural areas • An art exhibition focused on darkness supported by a lecture on the importance of darkness for nature • Stargazing at observatories
Farmer meets Neighbour Aim: Overcoming the barriers to the uptake of solar energy in agricultural areas Annex 1 pg. 60	• Providing access to external finance in order to fund the installation of renewable energy technologies • Engaging with participants on local food production and producers • Demonstrating how small contributions by consumers can make a difference in CO₂ reduction • Working towards climate neutral production processes • Stimulating energy awareness	Noord Brabant The Netherlands	• Farmers • Local citizens	• 26 farmers participated

Title and Aim	Objective/s	Location	Target Group/s	Results
Simple CO₂ Assessment Tool Aim: Development of a simple CO ₂ Assessment Tool for homeowners Annex 1 pg. 63	- To enable homeowners to assess the energy efficiency of their home and to relate this to the 'average' (Spanish) home - To promote good practice behaviour and technologies which lead to a reduction in energy demand and CO₂ savings	Spain	The general public	- Over 100 students involved 220 questionnaires answered
Incorporating a Sustainable Construction module into the Building and Engineering curriculum Aim: Embedding sustainability into building and engineering courses Annex 1 pg. 67	- To train future architects, designers and building engineers on energy efficiency in buildings - To learn from good practice techniques and initiatives across Europe (lessons from TrIsCo)	Seville, Spain	Students	Over 300 students involved
Best Practices for Energy Efficient Buildings Aim: Identifying best practices for energy efficient buildings Annex 1 pg. 70	To promote good practices for use of technologies and behaviours within buildings which lead to a reduction in energy demand and CO₂ savings.	Spain	- Students - Architects - Building managers - Designers - Construction engineers	- Over 300 students involved 17 best practices identified
Eco Day on Gotland Aim: Organising a large scale public event to promote energy and environmental best practices on Gotland Annex 1 pg. 78	- To inspire the people of Gotland to live more sustainably - To focus particularly on solutions from Gotland – in 2010 the theme was energy and energy optimisation	Gotland, Sweden	- The general public - Region Gotland staff	Approximately 1,000 people attended; 1.75% of the island's population
Environmental Calendar Aim: Mass communication campaign providing key information in a frequently used resource Annex 1 pg. 80	- Provision of key local information on waste recycling systems, local energy and environment projects as well as useful tips on low carbon behaviour - Linking low carbon behaviour to the natural environment and promoting a sense of ownership amongst islanders	Gotland, Sweden	The general public	The calendar was distributed to 35,000 households on Gotland (28,000 permanent residents and 7,000 summerhouses)

Title and Aim	Objective/s	Location	Target Group/s	Results
Public Campaigns for Solar and Biomass Heating Aim: Promoting renewable heating systems to businesses and residents on Gotland Annex 1 pg. 82	- To provide information on business opportunities within the renewable heat sector (solar and biomass) - To promote renewable heat to the general public	Gotland, Sweden	- The general public - National suppliers - Local SMEs (contractors and suppliers)	23 businesses were involved: 10 mainland suppliers, 13 local bio-energy and solar energy entrepreneurs
Changing Home Energy Use through School Education Programmes Aim: Promoting sustainable lifestyles to students and their families Annex 1 pg. 84	- Educating children to save energy and lead sustainable lifestyles - To encourage the children to share this knowledge with their families and communities	Prangli Island and Püünsi, Viimsi, Estonia	- School children - Families	65 children were involved in Prangli and Püünsi schools
Home Visits Aim: Face to face advice for 'hard to reach' communities to promote energy efficient behaviour Annex 1 pg. 86	To provide local residents with information about sustainable energy use and renewable energy sources	Prangli Island, Viimsi, Estonia	local homeowners	95 homes were visited
Partnership working with Co-operative Housing Associations Aim: Addressing a lack of knowledge amongst co-operative housing associations about alternative energy production, energy efficiency and environmentally friendly behaviour Annex 1 pg. 88	To provide local housing associations with practical advice and knowledge about renewable energy production, energy efficient measures and environmentally friendly behaviour	Viimsi, Estonia	Cooperative Housing Associations (members and Chairs)	41 attendees (38 CHA managers) involved

Title and Aim	Objective/s	Location	Target Group/s	Results
Condomini Virtuosi Aim: Fuel Poverty – encouraging behaviour change among tenants to save energy and reduce CO ₂ Annex 1 pg. 103	- To inform and raise awareness among tenants of the environmental impacts caused by everyday actions - To disseminate best practices in order to improve living conditions, save energy, reduce waste and stimulate virtuous actions	Municipality Reggio Emilia, Italy	Social Housing tenants	3 condominiums (200 tenants) directly involved to reduce their carbon footprint
Tavolo Anticrisi Aim: Tackling fuel poverty by improving the energy efficiency of social housing buildings Annex 1 pg. 105	- To inform and raise awareness among tenants of the environmental impacts caused by everyday actions - To disseminate best practices in order to improve living conditions, save energy, reduce waste and stimulate virtuous actions	Municipality Reggio Emilia, Emilia Romagna, Italy	households in or at risk of fuel poverty	- Establishment of a permanent working group - Signed agreement with local enterprises to: ⇒ Facilitate refurbishments (energy efficiency measures) in the home ⇒ Promote individual metering and monitoring systems (energy consumption) ⇒ Promote individual energy supply contracts - Creating a guide to energy saving and virtuous behaviours for tenants - Identification of incentives and financial tools for private parties
ECOABITA Aim: Promotion of an energy certification instrument to enable citizens to assess the energy efficiency of their homes. Annex 1 pg. 107	- To raise awareness on home energy consumption - To implement Energy Performance of Buildings Directive (2002/91/CE) - To implement energy saving actions	Emilia Romagna, Italy	- Citizens - local municipalities - utility companies - SMEs	309 ECOABITA Certifiers 42 public authorities involved 237 energy certificates issued with ECOABITA's system



4. Good Practice Discussion



Partners have critically reviewed each other's good practices and have selected those that are most applicable to their region or in some cases elements of these practices that are most applicable. Through the good practice review we explore the potential for transferability across regions.

the Environment Centre (tEC)

1. Climate Street Party Competition (BMF)

We see great potential for adopting the Climate Street Party model in the UK. Although there have been a range of community engagement initiatives in the UK (NESTA Big Green Challenge, EnergyShare, EST Green Communities) there has not to date been a national competition such as this.

Key to its success was the need to secure adequate funding and backing from a variety of institutions. In the case of the UK organisations such as DECC, the Met Office and household brands could inspire confidence and credibility as well as being able to mobilise funds and resources on a large scale. Alternatively a scaled down version of the competition (i.e. city wide) could be just as successful.

Success factors: the UK perspective

- Fun and interactive method of engaging with people to encourage them to reduce their CO₂ emissions and alter their behaviour
- Promotes community spirit through community based activities
- The competition emphasises the need for direct action and suggests a broad range of actions that a street or individual can adopt
- Commitment from a number of national and local organisations and businesses
- High visibility through large scale multi-media campaign

2. Energy Cafés (BMF)

The Energy Café element of the Climate Street Party Competition has similarities to the bite size training sessions that tEC has offered community champions and individuals in the UK. They both enable individuals to access professional advice on energy reduction and energy saving techniques.

The difference between these two initiatives is that the Energy Café model makes use of an informal setting (someone's home) and is primarily promoted through word of mouth (through the street network). Thus neighbours may have a greater interest in participating in the cafes. This links to social marketing research which suggests that people are more likely to trust their peers than the government⁸.

3. Environmental Calendar (RG)

The provision of a free environmental calendar can be seen as a useful tool in terms of promoting the region and the provision of key information to the general public who benefit from access to local information in a highly visible and attractive format.

Success factors: the UK perspective

- Promotion of the region (i.e. tourism and businesses)
- The calendar can be displayed the house in a prominent position for 12 months
- The structure lends itself to short simple messages
- The calendar can generate an appreciation of the local environment (local photos)
- A range of public information around environmental themes can be shared and accessed in one place: recycling and waste collection information; the promotion of regional initiatives (i.e. Hampshire area based insulation scheme), the grants and benefits available etc.

8. Hinds and Wentworth, Climate Change: Engagement and Behaviour, Parliamentary Office of Science and Technology Note Number: 347, January 2010, pg. 3

- The calendar can also include a tip for the week/month and information about key events in the area i.e. local food market; green fairs; cycling initiatives; arts and crafts fairs etc.
- Contact details for key (environmental) services in the area: local authority, environment agency, environmental health (local authority), local water board and energy companies, Trading Standards, Energy Saving Trust, tEC, handy man service, animal welfare (RSPCA).

Although this is a relatively low-tech intervention, the calendar can be seen as having a number of benefits that are easily transferable from region to region.

4. Provision of a Best Practice Manual for Building Users (UoS)

It is an excellent idea to provide a simple best practice manual as part of an introduction pack for any new tenant. In the UK, an EPC (Energy Performance Certificate) is required for all homes bought, sold and rented. EPCs contain:

- information on your home's energy use and carbon dioxide emissions
- a recommendation report with suggestions to reduce energy use and carbon dioxide emissions and possible cost savings per year⁹

However EPCs do not include information on simple energy saving measures, achievable by changing behaviour. There is scope for a manual which includes bespoke information about the best ways to use the home: from setting your thermostat correctly to switching off appliances at the wall.

tEC has been working with a regional RSL (Registered Social Landlord) to develop an information pack for new residents which not only covers information about energy saving in the home, but also takes a look at the wider lifestyle of the occupant. This can be seen as an opportunity to acclimatise new residents to their local area/environment by signposting them to local transport links; local food providers; local parks and community centres. However, a balance has to be struck between providing accurate information and being too prescriptive about people's lifestyles.

Furthermore, we feel that there is scope for physically displaying key information about the home for new occupants. For example, A5 stickers or labels on the boiler, fridge, thermostat, bath, radiators, lavatory, taps etc. explaining the 'benefits of good behaviour' (including potential financial savings). This may address the traditional issue of 'people not reading the manual'.

5. Home Visits (VV)

Clearly one of the best ways to impart energy efficiency advice is to visit individuals in their homes and offer bespoke advice. In this way the individuals receive tailored advice in a convenient way whilst in a safe and familiar environment. However, this type of engagement is often seen as prohibitively expensive as well as having insurance and loan working implications. Furthermore, it is important to consider undesirable comparisons to door to door selling or cold calling.

tEC is currently carrying out its own home visits as part of the Jubilee Eco Terrace initiative in Southsea, as well as EBICO funded project: Tackling Fuel Poverty in Southampton. In each case residents make appointments to see tEC's advisors. Even though the visits are free this serves to give value to the service.

Brabantse Milieufederatie (BMF)

1. Front Line Staff Training (tEC)

For BMF the interesting element of this good practice is the concept of 'fuel poverty' to prioritise households and to focus programs and measures and to mobilise different types of organisations or governmental institutions in the Netherlands. Research dating from 1993 showed that fuel poverty was not as big a problem as in the UK because of less people living on minimum income and a more modern housing stock. However the same report signals that rising fuel prices, rising rents and not taking

9. Direct Gov, www.direct.gov.uk, accessed 4th July 2011

insulation measures might change this situation. BMF concludes that in Noord Brabant these developments have indeed taken place in the last decade, therefore putting fuel poverty back on the agenda. Adopting this good practice immediately would be premature. However, BMF has the intention to start activities to 'reintroduce' the term and to start raising awareness.

2. Shop Visits and SME Environmental Performance Review (tEC)

Like in the UK, SMEs in Noord Brabant are a hard to reach group because of time constraints. Combining the visit to the premises with an environmental performance review increases the efficiency of a personal visit, while highly improving the chances that the entrepreneur will actually carry out improvements that will lead to CO₂ reduction. At the moment the regional government of Noord Brabant has a policy to actively support SME business to be innovative. To raise awareness of opportunities starting and quickly expanding SME's are visited by expert advisors. BMF would like to see this existing initiative coupled with sustainability advice and an environmental performance review.

3. Bite Size Training and Energy Monitor Loan Scheme (tEC)

As part of the TrIsCo activities, BMF organised the KlimaTeam project, an initiative that reached out to hard to reach target groups using a train-the-trainer model with trainers from within their respective communities. People with different cultural & educational backgrounds were educated on energy efficiency issues, after which they disseminated this knowledge to a group from within their own network and community. Comparable to the 'bite size information' approach as used by tEC, this project disseminated information about energy efficiency in a low key and easy to understand. A welcome addition to the KlimaTeam project would be the use of Energy Monitors. Currently participants are asked to monitor their meter readings weekly, however with a visible real time energy usage meter, BMF feels energy saving results could be improved.

4. Construction of Roof Gardens on Flat Roofs (UoS)

Alongside a focus on sustainable energy, BMF focuses on sustainable (regional) food policies in combination with the promotion of green urban spaces. Promoting roof gardens would not only contribute to CO₂ reduction through better insulation, but would also have a positive effect on urban climate adaptation, biodiversity and urban heat reduction.

5. Solar City of Seville: Photovoltaic Network in Municipal Buildings (UoS)

The Netherlands is committed to realising 14% sustainable energy production by 2020. Currently only 3-6% of this total has been achieved. BMF believes that local governments can play a significant role in raising more awareness for alternative forms of energy production and an exemplar project like Solar City of Seville could very well work in the Netherlands to stimulate the use of new renewable energy technologies.

Universidad de Sevilla (UoS)

1. Environmental Calendar (RG)

Local information provided in the calendar seems a good way of engaging and informing a significant number of households in the region. In Andalusia, the calendar could be delivered with the annual phonebook distribution, as an insert. The calendar will be available on the kitchen wall in many households for 12 months: significantly longer than other paper hand-outs which could end up in the recycling bin on the following day.

2. Climate Street Parties (BMF)

UoS see the climate street party model as an effective way of improving people's behaviour on energy savings. The competition makes good use of multimedia (i.e. TV) has the potential to make a big impact

on the Andalusian population.

In Andalusia, street parties are organised in every neighborhood, normally during spring and summer. These could be a perfect opportunity to promote CO₂ reduction strategies, through simple demonstrations of renewable energy, ie. small solar panel that warm up water in minutes, small windmills, etc. This could be a starting point for future competitions such as the Climate Street Parties.

3. Night of the Night (BMF)

In big cities like Seville, light contamination has a significant impact. The Night of the Night is a good way to show that it is possible to have a safe and pleasant city with less night-time lighting. Seville has approximately one million inhabitants, which could make it difficult to run a whole city initiative, however, this could be achieved in different neighborhoods in order to show what is possible.

4. ABC Energia (ACER)

Municipalities in Andalusia could work together in order to increase the visibility of their energy saving strategies in schools and public buildings) in order to achieve common goals such as Reggio Emilia 500 TEP saved with ABC Energia.

5. ECOABITA (ACER)

Through ECOABITA citizens have the opportunity to assess the energy efficiency of their homes. This type of intervention could be implemented in Andalusia; instead of using sophisticated software and analysis from architects and engineers; the CO₂ self assessment tool developed through TrIsCo could be utilised.

6. Home visits (VV)

Home visits with questionnaires and recommendations, provide local inhabitants with information about sustainable energy use and renewable energy sources in Viimsi, Estonia.

In Andalusia, this would be an interesting approach, especially with the elderly who have mobility problems. Often their dwellings do not have air conditioning, heating or wall insulation. Furthermore, it is common for windows not to close properly. A first step would be to identify apartment buildings which fail to meet the needs of the resident in order to develop strategies to address this issue in the region.

7. Free Phone Advice Line (tEC)

In the Andalusian region this is done by Agencia Andaluza de la Energía which offers a similar service to tEC's free phone advice line. However, this service could be extended to other organisations such as professional associations, architects, technical architects, engineers, who are not currently catered for.

In order to be a success phone number should appear in magazines and websites, and a variety of other media including adverts, notice boards and through council customer contact centres.

ACER Reggio Emilia (ACER)

1. Best Practice Manual for building users (UoS)

The delivery of a best practice manual could be applied in Reggio Emilia. Through the "Tavolo tecnico anticrisi" ACER is working on a similar manual and an exchange of experiences could be mutually beneficial for all organisations. One success factor could be to create a technical manual for the construction of the house (to be distributed to engineers and builders) and a user maintenance manual to be distributed to tenants. The manual would be simple, concise and well illustrated containing advice for the improvement of energy performance in homes.

2. Bite Size Training and Energy Monitor Loan Scheme (tEC)

Awareness of energy consumption and the effect of a tenants' daily activities on their energy demand is a crucial step in encouraging a change in behaviour. ACER plans to provide new homes with individual energy meters. This could be supported by providing training on how to read bills and on going support through a free phone advice line.

3. Climate Street Party Competition (BMF)

The climate street party model is very interesting and innovative. It could be developed at the regional level in Emilia Romagna. ACER plans to raise awareness and will propose the adoption of this model to policymakers.

4. Energy Cafés (BMF)

The informal approach of the meetings made in the Energy Cafés is interesting as it could be incorporated into the *Condomini Virtuosi* initiative by these types of events for some tenants.

5. Golden Star Municipalities (BMF)

This part of climate street parties could also be applied in the Reggio Emilia region to promote and strengthen the interaction between municipalities and citizens.

6. Home Visits (VV)

The face to face nature of the home visits is very important and is an approach used by ACER in the *Condomini Virtuosi* project. In order to facilitate the work—which is resource intensive—ACER intends to use condo administrators (building managers) who will be properly trained and will act as a point of contact for tenants.

7. School Education Programmes (tEC)

Energy education in schools is of high value to ACER in terms of improving the energy efficiency of school buildings and engaging with students. School education work features in the ABC Energy project which focuses on energy issues and good practices for sustainability.

Viimsi Vallavalitsus

1. Environmental Calendar (RG)

Viimsi considers the environmental calendar concept an excellent idea. Many local municipalities across Estonia give out a calendar (especially during election periods) and adding some environmental information to them would be relatively simple.

2. Eco Day on Gotland (RG)

There is potential for this type of event within Viimsi especially if they take place after work or on weekends and are located closely to where the target audience live.

3. Public Campaigns for Solar and Biomass Heating (MoG)

One of Estonia's largest fairs focuses on construction, so there is potential to incorporate renewable energy technologies to reach a large audience and stimulate a debate amongst all stakeholders: customer, suppliers and producers.

4. Farmer meets Neighbour (BMF)

Currently initiatives are carried out by organic food suppliers and producers in Estonia in an effort to bring the customers and producers together. This good practice could fit into this scheme and will certainly be considered for the future.

5. Night of the Night (BMF)

Light pollution is a rising issue in Estonia; in fact, local municipalities have reduced the operation of street lighting in response to the global economic crisis. Night of the Night is considered an excellent way of demonstrating to citizens that twenty-four hour a day lighting is unnecessary and expensive.

6. Open House Days (tEC)

Showcasing an exemplar retrofit home is considered a very useful good practice, however, there is a lack of retrofitted homes in the region. At present, funds are not available for the municipality to retrofit a demonstration home.

7. School Education Programmes (tEC)

In Viimsi there is a predominance of hard to reach communities. Viimsi consider it essential to develop their own school education programmes to change the attitudes and behaviours of future populations; but also to use the children as vehicles to disseminate knowledge to a wider more sceptical community.

Region Gotland (RG)

1. Best Practice Manual for building users (UoS)

Energy performance declarations are required for domestic and many commercial buildings both for rent and for sale in Sweden. Several possible sources of information on ways to save energy in the home are available on the web; but new methods for the provision of information are always welcome. Many landlords, especially in the public sector, also provide information to their tenant; one example is GotlandsHem which was visited during the Gotland study tour.

2. Energy Cafés (BMF)

The Energy Café concept is an interesting idea that Gotland might make use of, perhaps in combination with home visits i.e. “come and see the successful relatively simple changes carried out by this family after they had a visit from the energy advisor.”

3. Farmer meets Neighbour (BMF)

Using large roofs on farm buildings for solar energy installations is an excellent idea to generate power or hot water. In Stockholm Region, a scheme such as this might be possible in some more densely populated areas; but despite many solar hours per year large, solar cell installations are not viable options for Gotland, due to the restricted access to the grid.

4. Home Visits (VV)

This could be an option for a certain target group for example household that have high electrical bills. However, this type of engagement is often seen as prohibitively expensive as well as having insurance and loan working implications. Furthermore, it is important to consider the issues surrounding door to door selling.

5. Night of the Night (BMF)

Light pollution is not a big issue on the island of Gotland in comparison with other parts of the Stockholm Region. On the other hand areas that are both free from polluting noise and light are becoming more and more rare, so the Night of the Night might be used on Gotland to celebrate the preservation of these remaining areas.

6. School Education Programmes (tEC)

There is a clear possibility to deliver school programmes. In fact some work in this area is already underway in Gotland. Region Gotland used to have an environmental minibus with a variety of

equipment for energy and environment information and education. Both the bus and its driver are retired now, but they were useful both at schools and community events. The bus also made tours to other Baltic countries. Gotland would like to have a new bus, but it needs a certain kind of driver.

7. Solar City of Seville: Photovoltaic Network in Municipal Buildings (BMF)

Initiatives like this are important for cities and public buildings all over Europe.

8. Free Phone Advice Line- Energy and Sustainability Advice (tEC)

This service is comparable to the much appreciated Swedish municipal free energy advisory service for households and SME's, which is supported by the National Energy Agency, available in most Swedish municipalities.

9. Installation of rainwater tanks to supply toilets (UoS)

Double piping and storing of rainwater is still considered too expensive in Sweden, but this kind of system is certainly interesting from many environmental perspectives. It will probably be used in new constructions with eco credentials, but not for retrofitting existing buildings.



5. Recommendations



As a result of the activities undertaken throughout the project and wider reading on the subject, the partnership has formulated a series of recommendations for the effective delivery of community engagement initiatives aimed at promoting low carbon living. For clarity the recommendations are set out region by region. Subsequently, common themes linking the partner recommendations are explored.

the Environment Centre (tEC)

Ambitious and legally binding greenhouse gas (GHG) emissions reduction targets have focused the UK government's efforts to address climate change and have brought about a variety of packages to incentivise and oblige individuals, businesses and communities to take action. It is widely recognised, amongst UK Policymakers that changing individual and group behaviour is central to the effective delivery of policy outcomes¹⁰. Therefore community engagement and behaviour change must be considered crucial in the transition to low carbon economies.

The UK government's acknowledgement of the important role community engagement has in delivering a low carbon economy can be seen through recent research and guidance into behaviour change. In addition to this there have been calls for the increased involvement of community stakeholders and an increase in the number of community engagement initiatives focussing on community led action with multi-sector partnership backing.

A recent POST Note, Climate Change: Engagement and Behaviour¹¹ outlines the UK government's current approaches to public engagement and considers guidelines for future policy.

Through shared knowledge and experience and the identification of good practices from the TrIsCo partner regions, we have highlighted a number of key learning points for the development and delivery of effective community engagement and made recommendations for policymakers.

1. *Develop a community engagement action plan*

This may seem like an obvious first step, however, the desire to begin the delivery phase of a project can sometimes result in this stage being overlooked. It is surprising the number of initiatives which overlook key resources or end up duplicating work for the want of a simple action plan. In a time when resources are scarce and there are increased calls for multi-organisation partnerships, an action plan should form the backbone for any engagement work.

Community Engagement Action Plan: A simple framework

For any organisation looking to develop and carry out community engagement work there are a number of key things to consider before getting started:

- Identify your community and undertake a stakeholder analysis: investigate the existing community and business groups, community priorities and concerns; identify current initiatives in the area in order to avoid duplication; identify and act to remove the barriers to change
- Consult key groups, contacts and community champions with your project area
- If possible establish a working partnership to add value and attract additional funding and support
- Tailor your community engagement strategy: design your activities based on information gathered during the consultation
- Marketing and communications
- Implementation
- Monitoring and Evaluation – periodic review of project plan and activities

A similar process was carried out in the development and delivery of the Low Carbon Community Challenge project in Whitehill Bordon and during tEC's work in Hythe and Dibden Purlieu, Southampton.

10. Darnton, A; GSR Behaviour Change Knowledge Review, Practical Guide: An Overview of Behaviour Change Models and their Uses, 2008, www.gsr.gov.uk

11. Hinds and Wentworth, Climate Change: Engagement and Behaviour, Parliamentary Office of Science and Technology Note Number: 347, January 2010

2. *Partnerships can add value*

Partnership working can be an effective way of adding value and resources to an initiative. A recent report¹² focusing on the third sector's role in climate change mitigation strongly encourages local authorities to consider developing partnerships with TSOs to build resilient communities as they *will find third sector support essential in meeting their climate change, sustainability and adaptation objectives* (HM Government, 2010, pg. 61)

Through TrIsCo tEC has entered into working partnerships on a variety of community engagement initiatives including Thornhill Energy Focus, Jubilee Eco Terrace and Whitehill Bordon Eco-Town. Partnership working has been invaluable in terms of:

- Increasing the (sharing) resources available (including funding)
- Skills and knowledge shared
- Avoiding duplication (of other initiatives in the area)
- Engaging a wider community than would have been possible individually
- A coordinated communications strategy. Bringing together a strong partnership with different networks and communication techniques can amplify the dissemination of information.

Furthermore, partnership working can remove barriers facing smaller organisations without the capacity to take action individually. NESTA's policy paper, *Working with Communities to Tackle Climate Change: a practical approach for local government*, highlights the issue some communities have in turning ideas into community led action. Local authorities can make a big difference through its resources, influence and connections¹³.

3. *Don't spread yourself too thin.*

Whilst we all understand the importance of engaging maximum numbers in the climate change debate, organisations need to be realistic about their capacity to deliver activities within projects. It is important not to underestimate the resources required for delivering activities, correspondence, meetings with partners, research and communications. There is a balance to be struck between the resources available and proposed activities.

4. *Effective communication is key: audience, message, tools, delivery*

Traditionally under resourced, communication is central to effective delivery. Whilst communication strategies will vary between initiatives there are a set of common factors that should be considered:

- *Audience* – identify your target audience. Defra's environmental segmentation model¹⁴ divides the UK population into 7 groups according to their beliefs and values.
- *Messages* – identify the key messages from your initiative and tailor these for your intended audience. Sustainability issues are by their nature complex and sometimes it is necessary to simplify key issues and ideas to avoid confusion. These messages should be positive, consistently reinforced and based on sound and up to date information. Research has shown *messages are most effective if sustained over time, and refined through on-going evaluation*¹⁵.
- *Tools* – a variety of tools can be utilised to inform your audience and promote your initiative including: face to face contact, local networks, events, conferences, public consultations, newsletters, published documents, press releases, flyers, leaflets, brochures, posters, web sites, social networking sites, radio etc.

12. HM Government, *Shaping Our Future*, Joint Ministerial Third Sector Task Force on climate change, the environment and sustainable development, 2010

13. National Endowment for Science, Technology and the Arts (NESTA), *Working with Communities to Tackle Climate Change: Practical approaches for local government*, April 2010 www.nesta.org.uk

14. Department for Environment, Food and Rural Affairs, *A Framework for Pro-Environmental Behaviours*, January 2008, www.defra.gov.uk

15. Hinds and Wentworth, *Climate Change: Engagement and Behaviour*, Parliamentary Office of Science and Technology Note Number: 347, January 2010

- *Coordinated marketing* – when working in partnership with other organisations or initiatives it is imperative to coordinate your marketing strategy in order to avoid confusion and ‘green fatigue’. For example the Low Carbon Community Challenge project undertaken in Whitehill Bordon Eco Town was promoted under the Eco Town ‘umbrella’. This was to avoid confusion, repetition and over exposure to a number of separately funded initiatives taking place in the local area.
- *Publicise successes* – demonstrating the ‘real’ gains and progress made through an initiative can bolster moral, reinforce messages and serve to recruit new community members.

Through our experience, a multi-media strategy can offer the greatest opportunity to engage with the widest possible audience. Furthermore using non environmental message (i.e. based on financial and or health benefits) can be more effective in motivating certain groups. However, recent research has suggested that at least some explanation of the environmental imperative behind any attempt at behaviour change is necessary to avoid the ‘rebound effect’ – for instance, people saving money from energy efficiency initiatives may spend the money saved on a long-haul flight, therefore offsetting any carbon savings achieved¹⁶.

5. *Incentives, competitions and prizes*

Incentivising individuals and groups to take action has proved to be effective throughout the TrisCo project. Whether simply giving away lightbulbs and powerdowns to encourage people to engage with staff at events or through competitions on the scale of the climate street parties; these techniques can be seen as effective tools for engaging people to take action.

Despite heavily subsidised energy efficiency initiatives such as CERT (UK Carbon Emissions Reduction Target) which offers free or discounted loft and cavity wall insulation; uptake in some areas is still slow. It is widely recognised that people have a tendency towards short and medium term goals. This coupled with the perceived hassle of installing energy efficiency measures can limit the success of these initiatives. One way to overcome this barrier is to provide additional upfront incentives for those undertaking energy efficiency measures for example an entitlement to a one month council tax holiday council.

NESTA’s Big Green Challenge¹⁷, British Gas and River Cottage’s Energy Share Fund¹⁸ and DECC’s Low Carbon Community Challenge all use an element of competition to good effect. These initiatives focus on community-led responses to climate change, where groups compete for funds to realise their green vision. Increasingly, funders are seeking to support projects which can demonstrate a strong level of local buy-in at an early stage and using competition can be seen as a good way of achieving this.

6. *Engage community champions*

It is widely recognised that communities will need to play a critical role in helping to meet the government’s high CO₂ reduction targets. An important element in the effectiveness of community engagement is the ‘champion’. A champion is an enthusiastic and dedicated individual living in the community who takes a proactive role in spreading the message and encouraging people to get involved.

Research has found that people are more likely to trust their peers other than the ‘officials’. Champions are people who are visible within their community and can help to alleviate the perception of a strategy being imposed upon them.

16. The ENDS Report 434 28th March 2011 pp.46-50

17. National Endowment for Science, Technology and the Arts is an independent body with a mission to make the UK more innovative. <http://www.nesta.org.uk/>

18. <http://www.energyshare.com/fund/about-applying/>

7. *Interest Free or Low Interest Loans can stimulate action*

Governments have used a variety of financial mechanisms to overcome the costs barriers associated with retrofit and renewable technology installations.

East Hampshire District Council secured funding under the LCCC for 'Ecofit Whitehill-Bordon', a whole house refurbishment scheme for existing housing in Whitehill-Bordon Eco-Town. Loans for up to £10,000 for packages of retrofit measures were made available to residents on a first come, first served basis. An Ecofit Advisor facilitated the installation of measures and introduced a behaviour change programme.

Key to the success of the scheme was the Ecofit Advisor who was able to dedicate considerable time and resources to recruit and assist the residents from the initial survey through to the completed retrofit. The scheme proved to be very popular with a waiting list for those who missed out on the initial round of funding.

The UK government is currently finalising the details of the Green Deal - a similar low interest loan initiative which is to be rolled out nationally in October 2012. We would strongly recommend that financial provisions are in place to enable the green deal assessors to be suitably experienced, trained and able to dedicate enough time to ensure customer confidence and satisfaction.

8. *Fuel Poverty- training for front line staff*

Britain's old and inefficient housing stock not only gives rise to 27% of the UK's total CO₂ emissions, it is also a significant contributing factor to the high incidence of fuel poverty in the UK. In October 2010, the UK Government announced it would commission an independent review of its fuel poverty policy to take a fresh look at the issue in order to focus its available resources more effectively. Subsequently the Hills Review launched a call for evidence.

tEC submitted a series of recommendations based on its experiences in delivering a programme of fuel poverty outreach work throughout Hampshire, the Isle of Wight and West Sussex and complementary work undertaken through TrIsCo. Recommendations include:

- Training programmes for front line staff provide a valuable opportunity to raise awareness of fuel poverty amongst relevant workers – this addresses a significant knowledge gap.
- Hampshire County Council's Trigger Tool (which includes tEC's free phone advice line number) is available for staff and volunteers who visit older people in their homes. This enables them to signpost clients to other agencies for help. This has been an effective way of identifying and targeting vulnerable people and providing them with fuel poverty assistance.
- Partnership working with other trusted agencies is an essential component to ensure that help can be targeted *and* delivered effectively.
- A commonly recognised barrier to the uptake of loft insulation is an individual's inability to clear belongings from the loft space (particularly amongst older people and/or those suffering from ill health or disability). To address this tEC initiated a small pilot project in conjunction with Eastleigh Borough Council and the Wheatsheaf Trust charity, which offered elderly residents loft insulation combined with a loft clearance service. This resulted in an additional 25 vulnerable households being helped. We would recommend that finance is made available for similar initiatives.

9. *Environmental education programmes –early intervention*

Current climate change strategies are primarily aimed at adults and often give little thought to engaging young people. Schools in the UK are able to make their own choices about how to teach issues of climate change; however they can suffer from lack of expertise and resources. Therefore there is a risk that a generation of young people will enter adulthood without the knowledge and ability to adapt to

their changing circumstances. Furthermore, it is vital that we do not underestimate the influence that young people can have on their families and their communities. We should make good use of the groundswell of support that young people can generate as a catalyst for widespread behaviour change within the families and communities they are part of.

There is a clear gap to be filled: early intervention is a cost effective way to ensure a lasting impact in the UK.

To address this issue, tEC has been running environmental education programmes predominantly for primary schools across South East England for over ten years (see School Education Programmes good practice, Annex 1 pg. 18). To build on the successes achieved through TrIsCo, tEC is currently developing a Secondary schools package.

We recommend that UK and EU funding be allocated for the development and promotion of environmental education programmes with cross-border partners as there is much to learn from shared experience and best practice from different regions.

10. On-going support and training for all

As part of a coherent community engagement strategy it is essential to provide on-going support to individuals and groups. All too often initiatives fail to maintain momentum or retain support. Experience through TrIsCo has shown that this can happen when individuals feel that they are not valued and/or that what they are doing is not making a difference. In order to address this issue it is essential to publicise successes and provide on-going support and training.

Brabantse Milieufederatie (BMF)

In the Netherlands there are no government policies explicitly aimed at behaviour change. Evoking a specific change in the behaviour of individuals or organisations, however, will always be part and parcel of the motivation for policy development. Implicitly, therefore, all policy documents will ultimately address behaviour change, one way or another.

According to a range of political views people should be interested in healthy living, saving money, using our limited natural resources sparsely and treating each other with respect. Some of the major challenges of our modern-day society can only be addressed successfully if people significantly change their behaviour. At the same time, however, citizens are individually increasingly confronted more choices and bear a personal responsibility for making the right decisions. In general, policy developers expect citizens to make the right – i.e. the democratically preferred – decisions in a modern world in which more and more choices have become available to them.

The dominant view among policymakers underlying this expectation is that people are naturally inclined to make rational decisions. It is expected that the 'right' decisions will be made, once there is a level playing field, a market mechanism in place, and sufficient information available. Policy efforts are thus often aimed at providing the 'calculating citizen' with enough transparency, information, and publicity, as well as exposing him or her to a fair amount of competition. However, an increasing body of evidence suggests that human choices are far from rational. Emotions and social relations play an important part in the decision making process.

In spite of this, behaviour remains predictable to a certain extent and can be influenced, directed, or manipulated, even without the traditional government instruments: financial incentives or the regulatory framework of do's and don'ts. The desired behaviour might be triggered by slightly altering the context

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In view of the POWER Programme Road Map for Behaviour Change, the Dutch programme "Learning for Sustainable Development" seems particularly relevant (in Dutch: [Leren voor Duurzame Ontwikkeling – LvDO](#)). It is a collaborative programme of the various government tiers in the Netherlands and cuts across a wide range of policy sectors. The LvDO Programme aims to enhance learning processes on sustainability with respect to many issues. "Learning for Sustainable Development" helps students, professionals, organisations, and other individuals to identify and make sustainable choices. Participants in decision-making processes work together to resolve problems, carefully balancing the interests of people, nature and the environment, as well as the economy, in perspective of global responsibility, future orientation, and shared values.

In 2008 sustainable development became a cornerstone of the policy of the Dutch National Administration. There is now an increasing awareness of the urgency of 'sustainable' solutions to issues in the areas of climate change, social inequality, deterioration of ecosystems and biodiversity, global poverty, and lack of education and healthcare for billions of people around the world. The first period of the programme Learning for Sustainable Development (2004-2007) contributed to this success. It paved the way for the present 2008-2011 version of the LvDO Programme, which has as its main objective to focus all efforts on turning principles into learning, behaviour change, and action, hence the motto: "[From strategy to \(general\) practice](#)". Following a recent, general debate in parliament, the intention to continue the LvDO Programme in the coming years has been expressed unambiguously. The development of a new version of the Programme will be addressed in the first half of 2012 and could be a fertile ground for the POWER recommendations.

The growing sense of urgency over the past few years has led to a stronger focus on sustainability in numerous policy areas and programme agreements of authorities, schools and community organisations, and to the development of new business philosophies (corporate social responsibility, cradle-to-cradle principles) and has had a growing influence on the behaviour of citizens and cosmopolitans. A recent study has shown that more and more organisations (84% of the responses) insist on having their own policy for sustainable travel. 80% of these policies led to behaviour change of their co-workers and employees. The most important motive for having such a policy is its positive contribution towards the image of the organisation. CO₂ reduction and cost effectiveness are only mentioned as secondary motives. A meagre 11% were persuaded to develop the policy in order to comply with government legislation (<http://www.energieondernemer.nl/2011/02/duurzaam-vervoersbeleid-leidt-tot-gedragsverandering-medewerkers/>).

Noord Brabant has subscribed to the LvDO Programme (2008-2011) and complied with the following aims:

- Students and pupils learn how to behave more sustainably
- Organisations learn to operate more sustainably
- The Province is to realise a number of 'practical testing grounds' (proeftuinen) for sustainable development, which will provide a real-world context for achieving these objectives as well as for involving citizens and professionals in behaviour changing learning experiences

In the past four years practical testing grounds have been realised, among others, for:

- new urban developments (e.g. Geerpark in Heusden, which has been presented as part of the SILCS project; <http://www.geerpark.nl/home>)
- revitalizing urban areas (e.g. Helmond West, involving the building of sustainable houses, the inclusion of a green brook – de Goorloop – as part of public space, and the establishment of a public school annex community centre; <http://www.helmondwest.nl/Smartsite.shtml?id=136702>)
- industrial symbiosis—e.g. with the Port Authorities of Moerdijk, which involves the development of the Energy Web for exchange of energy surplus, CO₂, and other waste materials, as well as the establishment of innovative relationships between neighbouring companies and with local communities; <http://www.duurzameverbindingenmoerdijk.nl/>
- healthy primary school buildings (e.g. the Pieter Wijtenschool in Waalwijk that completely restructured its curriculum around sustainability issues at the same time as making its building healthy, energy efficient and more sustainable; <http://www.schoolinside.nl/show/nl/kennisgebieden/1,2,42,Zes+Frisse+Scholen+in+Brabant.php>).

Presently, the LvDO programme is aimed at safeguarding the results of these practical testing grounds for future reference with the help of partner organisations, dedicated promotional activities and vocational training centres (<http://www.vibaexpo.nl/themas-projecten/brabantwoning>).

Closely related to the LvDO Programme the Brabant Biodiversity Programme has been operational during the same period with a particular focus on the value of biodiversity and ecosystems for everyday life (i.e. ‘gardens and food’). This Programme was primarily addressed municipalities of Noord Brabant and has been very successful in involving them; raising awareness on biodiversity with respect to planning issues and education. Special subprograms have been initiated for farmers and for (small) private enterprises introducing biodiversity in production processes and real-estate development (<http://www.biodiversiteitbrabant.nl/>).

Another related effort in Noord Brabant has been aimed at promoting good, healthy and organically grown food. For a number of years the provincial government has been supporting the national Dutch programme around the Week of Flavours (Week van de Smaak) with almost a hundred initiatives annually aimed at the general public, school children, restaurants and caterers, and the kitchen staff of hospitals and care homes ([http://www.weekvandesmaak.nl/smaakregio/Noord Brabant/](http://www.weekvandesmaak.nl/smaakregio/Noord%20Brabant/)). The Week of Flavours is, in fact, one of several, as yet largely unrelated activities, that raise awareness about the food choices we make and the low carbon development of our own region and our cities (see for instance <http://www.brabantsemilieufederatie.nl/voedsel>).

In spite of these examples and efforts in which behaviour change is clearly intrinsic, behaviour change as such is not considered an explicit topic for policy development in Noord Brabant. The provincial level thus resembles the national government level.

From the activities delivered by the Brabantse Milieufederatie through the TrisCo project; five key principles have been identified which could be considered for more sustainable, regional policy development.

1. The Climate Street Parties, Energy Cafés, KlimaTeam and Farmer meets Neighbour projects show that behaviour change starts with participation from below, at the community level where people communicate with each other. Being ‘on speaking terms’ and ‘ownership’ are important prerequisites for people to take responsibility and initiate common actions for a more sustainable lifestyle.

2. Schools that offer inspiration are able to nourish behaviour change. Being at school and learning should be fun, because this is where young people start to formulate their ambitions for life. Schools and teachers help them to generate the passion and convictions that are needed to fulfil these ambitions. The BMF educational project shows that connecting schools with local sustainable initiatives provides unique and inspiring learning opportunities for all parties involved.
3. Behaviour change requires a new type of government role. Public administration should learn to do less and achieve more by bringing different groups of people together. Its specific role can be identified as facilitating more effective social interactions which are needed to establish a more sustainable society. This is based on a governance model in which the 'public cause' has become the 'common cause' of citizens, communities, local entrepreneurs, and government institutions alike.
4. Like schools, local governments should improve their connection with local sustainability initiatives. The Golden Star Municipality project demonstrates that it is possible to make interesting connections where local climate policy targets are met through supporting and facilitating local initiatives. One of the major benefits of this kind of approach is that there is pre-existing support for these initiatives.

From principle two and three it becomes clear that behaviour can be influenced by examples and showcasing 'good practices.' To maximise the potential influence of these examples and good practices, there is a need for a better understanding of how behaviour patterns change in relation to and interaction with the behaviour of others in the social environment.

5. From our experience in the TrIsCo project and policy examples within Noord Brabant it has become clear that the term sustainability is very broad and that there are many interpretations regarding what is classified as sustainable behaviour. Following the previous principles it is clear that better cooperation between different institutes and organisations in society and therefore clear and unambiguous communication is key for behaviour change. Learning to speak a common language can be regarded as the fundament to facilitate behaviour change.

Universidad de Sevilla

The university has developed a Sustainable Construction module as part of its Building and Engineering course. This incorporates a range of practical examples, case studies and good practices identified through the TrIsCo project.

Course leaders at the university strongly believe that it is important to train future architects, designers and building engineers about energy efficiency in buildings using practical examples and learning from good practice techniques and initiatives across Europe. Through the analysis of good practices students have become aware of the range of initiatives being undertaken across Europe and how they can use this learning in their future careers. UoS recommends that similar work be carried out by other education institutes.

Tools such as the simple CO₂ assessment tool are an effective way of helping students gain a better understanding of the complicated professional software which they will use to calculate energy demand and certifications of buildings in the future.

The University of Seville will use its position as a leading academic and research institute to influence regional stakeholders; as well as promoting lessons learnt for use within the university itself.

ACER Reggio Emilia

There are currently no standards or programmes (at the national or regional level) explicitly aimed at behaviour change, however, this concept is implicit in many policy and planning documents. Actions aimed at addressing behaviours are fragmented in many areas: education, business, agriculture, local authorities. The integration of all these activities through a joint programme and regional goals could be very useful in the Emilia Romagna Region. With a single comprehensive programme efforts to affect behaviour change could be more effective: targeting a variety of audiences, allocating funding appropriately and providing incentives for individuals, groups and businesses).

The exchange of knowledge (as experienced through TrIsCo) can be a powerful engine to drive a change in behaviour: by promoting good practices to the region's citizens, to increase the awareness that others initiatives and experiences. It can also inform policies, strategies and initiatives within the region.

Developing good relationships with the community (i.e. face to face engagement with citizens) and through participating in and hosting study tours are two positive approaches which will be promoted in the region for future projects. This would be of particular relevance for energy efficiency projects with a focus on training and education.

Key recommendations:

- Development of an integrated approach to policy and planning including behavioural change components in all the national and regional level.
- Widely disseminate information on the effects on the environment of current practices in order to promote changes in behaviour necessary for low carbon living ;
- Promoting good practices identified through TrIsCo at the regional and national level and proposing the adoption of those most applicable to the Emilia Romagna Region;
- Establish a lasting relationship with the TrIsCo partners and their networks for a continuation of shared knowledge and best practice in the future.

Viimsi Vallavalitsus

The development and delivery of school education programmes focusing on sustainability have proved a success and Viimsi recommends building upon its successes through TrIsCo to develop similar education programmes. These programmes could be rolled out across the region or even country

An amendment has been made in the recent National District Heating Law (01/11/2010), allowing for renewable energy heating systems in district heating areas, which was previously prohibited. Viimsi Vallavalitsus has had several meetings with the Green Party in the Estonian parliament to investigate ways of making this happen in the region.

Through TrIsCo funding, project officers were able engage with 'hard to reach' communities through home visits and working with village societies. Despite the resource intensive nature of these sorts of activities it is recommended that the time be taken to build trust and develop good relationships with these communities. Light touch engagement has proved ineffective in terms of stimulating interest within these groups.

Region Gotland

Region Gotland is considered the exemplar partner within the TrIsCo project due its impressive track record and its efforts to become a truly sustainable island community. Gotland has set itself the challenge of having a climate neutral energy supply by 2025. The island is also a showcase for various interesting and innovative renewable energy initiatives. Key to Gotland's success is its longstanding political commitment to innovative sustainable policies coupled with public engagement and ownership of renewable energy solutions.

A key element of Gotland's transition to a climate neutral energy supply has been the development of the municipality's Energy Plan. This plan is based on the vision of the entire island contributing to a sustainable community and specifically to the municipality's aims and targets for ecologically sustainable development. For more information visit: www.gotland.se/eco

With a focus on renewable energy systems and solutions, Region Gotland's work through TrIsCo sought to inform, educate and influence its citizens and businesses through a range of engagement and communication activities. Key success factors for CO₂ reduction identified through this work are as follows:

1. Showcasing successful technologies and initiatives

Demonstrations and exhibitions are an excellent way of showcasing technologies and initiatives by making them more accessible, visible and relevant. They are also an effective tool for stimulating debate on the wider issues of sustainable societies. Most Gotlanders have an environmental consciousness and a positive attitude towards changes that contribute to a better environment. Information raises the level of knowledge, awareness and influence individual's attitudes and behaviours.

The most effective dissemination activities are face to face and exhibitions facilitate this type of interaction. They provide an opportunity to gather a variety of stakeholders from technical experts, manufactures and supplier through to the end user; thus providing possibilities for personal interactions between customers and suppliers. However, these events can be expensive and time consuming.

2. Overcoming Barriers

Information can overcome practical or economic obstacles:

- Availability - by connecting suppliers, installers and customers
- Economic resources - by showing different possible financing i.e. performance contracting
- Time - by showcasing new combined RE heating systems which require less management
- Ease of use – new technologies and systems must user friendly, therefore encouraging new habits

3. Communication and Marketing Campaigns

Research has shown that mass communication campaigns (i.e. public information, brochures and advertisements) have a weak level of influence. McGuire 1990 concluded that campaigns aimed at changing individuals behaviour had a statistical significance of less than one per cent.

In order to improve the effectiveness of mass communication it is essential to clearly define target groups. To ensure success a good level of knowledge about these groups - their habits, attitudes, opinions and needs – is crucial. Only then can communications be targeted or tailored effectively. For example, campaigns designed to promote renewable energy for the home directed at plumbing engineers can be very useful. They are seen by their customers as 'experts' and as such they can influence a homeowner's purchasing decisions.

Whilst communication and public engagement is an essential tool; information alone is not enough to create a new behaviour.

Changes in behaviour require new infrastructures and a market for renewable energy - someone must take the initiative and lead the way. In the case of Gotland, the municipality's transition to renewable energy within its own operations can be a driving force in that development. Dependence upon fossil fuels has lessened through the development of solar and biomass systems infrastructure. This has resulted in a significant contribution to the social, environmental and economic sustainable development of the island. Local renewable energy solutions also give economic advantages and create new jobs.

Nevertheless, face to face communication is crucial for the development of new behaviours. Exchange of best practice and knowledge through projects such as TrIsCo is a very useful of any renewable energy, climate change or low carbon strategy.

Common Themes

Although the partnership has identified a range of recommendations, some common themes have emerged.

- *Partnership working- doing more with less*
Partners have identified the real benefit to be gained by working with different agencies, organisations and interested parties to drawn on existing skills and share knowledge which can add value especially in these times of constrained finances.
- *Grass roots action – ownership and community cohesion*
Partners have identified the importance of generating a sense of ownership of initiatives within communities. This has been considered critical to the success of a number of low carbon activities i.e. Climate Street Parties, NESTA's Big Green Challenge etc.
- *Exchange of experience – showcasing best practice and inspiring action*
EU projects like TrIsCo provide a unique opportunity to visit and learn from other regions. All partners have genuinely benefitted from the exchange of knowledge and best practice through study tours and interregional events.
- *Environmental education - Early intervention*
Current climate change strategies are primarily aimed at adults and often and give little thought to engaging young people. It is vital that we do not underestimate the influence that young people can have on their families and their communities. If we are looking to change attitudes and behaviours in the long-term it is essential to engage with young people as they develop their skills and knowledge. Not only are they the consumers of the future but they are also the designers, engineers, business people and politicians. Early intervention is key.

EU funding should be allocated for environmental education programmes with cross-border partners as there is much to learn from shared experience and best practice from different regions.



6. Conclusions



The TrIsCo project has been extremely useful as a means of sharing good practice, knowledge and skills. It has showcased innovative and effective initiatives to engage with communities on the issues of climate change and the transition to a low carbon economy.

Activities have resulted in real savings in terms of CO₂ and reached significant numbers of people from a variety of communities, for example :

- tEC's free phone advice line service has facilitated insulation measures in 421 homes and the installation of a 3.04 kW PV system leading to annual savings of 308.53tCO₂
- The Climate Street Party competition (2009/2010) involved 2,193 people in Noord Brabant, creating 48 street networks

The partnership feels that the good practice catalogue has real scope for transferability across the European Union not only due to the geographical, political and socio-economic diversity of the partnership; but also because of the wide variety of initiatives undertaken. It is sincerely hoped that individuals, community groups, businesses and public authorities will be inspired by these good practices and use them to inform future campaigns.

It is however, important to consider the outcomes of TrIsCo within the context of the wider climate change debate. Even with massive up-scaling of community led initiatives such as those showcased in this catalogue; these efforts will fall far short of current mitigation targets. In short there is only so much individuals can do within the constraints of the infrastructure and institutions in which they live, travel and work. What is required to meet these unprecedented challenges is both wider political and societal change to allow for the shift to a low carbon economy.

The challenge is to communicate the issues surrounding climate change effectively and to generate understanding and acceptance of future policy amongst the public; whilst at the same time utilising grass-root support from community led initiatives.

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