



## Prison Energy Project Severn Wye Energy Agency, UK

### Summary

The Prison Energy Project was delivered in South West England and Wales in partnership with the Prison Service, Energy Saving Trust and Local Energy Agencies, led by Severn Wye Energy Agency. Funding was provided for the project by the Prison Service, Energy Saving Trust and Local Authorities. The project sought to engage the prison service and its communities in a holistic approach, delivering energy surveys to prisons, offender education, staff training and advice and support to offenders’ families. The project engaged more than 2000 offender families, trained 200 prison staff and more than 50 prisoners received accredited training in sustainable energy which has now been integrated into mainstream training services. The holistic approach of this project in engaging with the whole prison community at the appropriate level is the best route to success in reducing overall emissions within and around the prison. The findings of this project show there is a very good opportunity for many aspects to be replicated in other locations.

#### End-user area

- New buildings
- Refurbishment of buildings
- Transport and mobility
- Financial instruments
- Industry
- Legal initiatives (regulations, directives, etc)
- Planning issues
- Sustainable communities
- User behaviour
- Education
- Other

#### Target Audience

- Citizens
- Households
- Property owners
- Schools and universities
- Decision makers
- Local and regional authorities
- Transport companies
- Utilities
- ESCOs
- Architects and engineers
- Financial institutions
- Other

#### Technical

- Energy efficiency
- Heating
- Cooling
- Appliances
- Lighting
- CHP
- District Heating
- Solar energy
- Biomass
- Wind
- Geothermal
- Hydro power
- Other

### Context

The project was delivered to nine prisons throughout Wales and the South West of England against the background of a feasibility study. This indicated the potential for a holistic approach to energy saving and highlighted the needs, in terms of the prison services energy consumption, and the potential to engage members of this community.

- 1,227 GWh of energy consumption across 137 prisons nationally demonstrated the need for energy surveys and staff training on energy management
- Prisoner families often eligible for regional and national support for energy efficiency measures due to their socio-economic situations
- Potential to engage offenders by offering them accredited training that highlighted energy issues and the applications for life and work



### Objectives

- To reduce carbon emissions and increase energy efficiency in prison sites through the provision of energy surveys
- Increase awareness of energy issues amongst prison staff through training
- To develop offender understanding of sustainable energy issues in relation to future citizenship and employment
- To raise awareness of sustainable energy issues and the support available to prison staff and offender families through the domestic support services
- To develop a holistic approach that is replicable on a national and European scale

### Process

Each of the nine participating prisons received expert technical support to assess their energy needs. Annual consumption was assessed and an on-site energy survey was carried out to explore how energy is currently being used. These surveys provided an opportunity for site managers to establish on site energy management committees to action the key recommendations.

A training course developed specifically for prison staff was delivered in the participating sites. A part of this session uses the results from the relevant energy surveys to inform the staff of the opportunities to make behavioural changes in order to reduce energy consumption at work. The second section of the training provides information and support for increasing home energy efficiency and details measures that can be installed to significantly decrease energy costs and carbon emissions. In order to encourage staff participation on such courses the initial reluctance of staff needs to be tackled. This may in part be achieved by promotional activity including posters with review comments from training managers that have already seen the success of the course.

When training prisoners all courses should be accredited so that they contribute to future employability of prisoners by providing a recognised qualification. This aids the development of work and life skills that are key to reducing re-offending rates. A new course was developed:

#### “Sustainable Energy Skills for Life and Work”

This is a 15 hour course that provides prisoners with training on:  
 Current Issues in Sustainability  
 Energy for Individuals in the Community  
 Opportunities in Sustainable Energy

Establishing an accredited training course through prison education services requires a close collaboration with a number of different groups. Organising this collaboration to fit with implementation timetables is problematic however as the course was well received by offenders the time spent in development was worthwhile.

Monthly energy surgeries were held with each participating prison in partnership with seven local Energy Efficiency Advice Centres. Trained advisors provided energy efficiency advice and support to both prison staff and prisoners’ visitors. An issue with this delivery was time constraints, however targeted follow-up from the energy surgeries could help to increase the number of measures installed.

### Financial resources and partners

The value of the project was €239,760. This was funded by Her Majesty’s Prison Service, the Energy Saving Trust, Local Authorities, and time in kind from Energy Agencies.

Partner	Role
Energy Efficiency	▪ Monthly advice surgeries at each prison for 18 months



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Advice Centres	<ul style="list-style-type: none"> <li>▪ Engage with at least 12,200 people through the surgeries</li> <li>▪ Achieve 2135 completed Home Energy Check forms</li> <li>▪ Install energy saving measure to reduce carbon emissions by at least 111 tonnes carbon p.a.</li> </ul>
SWEA, City and Guilds, A4e, Strode, HMPS education services	<ul style="list-style-type: none"> <li>▪ Develop and gain accreditation for one energy training course for prisoners</li> <li>▪ Deliver training to at least 100 prisoners</li> <li>▪ Embed course into ongoing learning &amp; skills programme at prisons</li> </ul>
SWEA, HMPS training services	<ul style="list-style-type: none"> <li>▪ Deliver at least 2 training sessions per prison</li> <li>▪ Integrate course into induction of new staff</li> </ul>
SWEA, HMPS estates and works managers	<ul style="list-style-type: none"> <li>▪ Carry out 1 survey of at least 9 prisons</li> <li>▪ Deliver recommendations to each energy manager/committee</li> <li>▪ Establish a framework for implementing recommendations</li> <li>▪ Use detail from surveys in training sessions for prison staff</li> </ul>
SWEA	<ul style="list-style-type: none"> <li>▪ Provide coordinated dissemination to each Government Office region nationally, with view to establishing local partnerships to replicate programme nationally and across Europe</li> </ul>

## Results

- New partnerships have been developed with local authorities, local EEACs and local prisons not only during the term of this project, but also beyond it through the dissemination programme.
- Partnerships have been developed between local EEACs and subcontracted training organisations to the prison service, offering the potential for new training development opportunities beyond prisons, for example improved basic skills in other sectors
- Welsh sites have achieved a reduction of CO<sub>2</sub> emissions in the region of 257 TCO<sub>2</sub> that can be attributed to the project action
- Energy management committees are established and engaged in taking forward survey recommendations across all the prison sites
- 97 HMPS staff have received training on relevant energy issues; 100% state that it will positively affect their future actions and 49% of these that it will make a significant difference to their future actions
- 46% have been put in touch with EEAC services furthering the impact of the project on the domestic sector
- A new qualification for the energy sector, accredited and available through City and Guilds; two colleges and nineteen tutors fully prepared to deliver the course
- In two months of pilot delivery at five establishments, 50 candidates have gained the qualification; a further 672 candidates estimated for the coming year.
- 164 energy surgeries implemented leading to 2602 people engaged with EEAC services and 1164 completed Home Energy Checks, with 97 referrals to schemes and 28 measures installed

## Lessons learned and repeatability

- 1) The holistic approach of this project in engaging with the whole prison community at the appropriate level is the best route to success in reducing overall emissions within and around the prison, however there is some benefit to replicating separate aspects of the project.
- 2) A multi-faceted project such as this requires a large number of key contacts in each area. As responsibilities for energy management and awareness raising are usually not distinctly defined in peoples' job roles, a great deal of groundwork needs to be done in order to achieve the contacts needed for instigating the work.
- 3) Support from senior management, not only on each site but from regional and national managers also, plays a significant role in encouraging others to be proactive around the project work.



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- 4) Whilst energy surveys produced many significant actions and were very successful in generating understanding of the energy needs at each site, it is felt that that the recommendations made are in many cases difficult to implement and would benefit from a more sustained period of follow up advice and support.
- 5) There is an area of missed opportunity with regards to follow up support that is provided through the EEACs to those individuals that were engaged through the energy surgeries. Whilst the number of home energy checks completed was high, the number of actual referrals made to schemes, and the measures installed was not very high. The onus lies with the home occupier to identify the specific opportunities for themselves and then make an application for measures to be installed in their homes.
- 6) Staff training is a very successful way to promote energy efficient practices at home and at work but this needs to be carefully constructed in order to motivate what are often reluctant audiences.
- 7) Accredited training in this area is in demand but the implementation of such a thing relies on a very cohesive approach from a number of different key actors, in this instance, the colleges, City and Guilds, Heads of Learning and skills, tutors and the course developers.

**Contact for more information:**

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Printed reports or other literature available:

Title: Prison Energy Project – Final Report (exclusive of training materials which are available subject to licence agreement and fee)

Cost: £20