

Economic Development Committee

EDC 05-03(p4) – Annex B

Date: Thursday, 20 March 2003

Time: 9.00 – 12.30

Venue: Committee Room 1, National Assembly for Wales, Cardiff Bay

Title: Energy Review: Final report on Energy Efficiency

Economic Development Committee Review of Energy Policy in Wales Part 2: Energy Efficiency - Final Report

March 2003

Chairs Foreword

Membership of the Committee

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CHAIR'S FOREWORD

[with photograph]

This is the fourth report in the Economic Development Committee's review of energy policy and gives the Committee's conclusions following the consultation on its proposals in respect of energy efficiency.

We very much appreciate the wide ranging, and carefully considered, responses put to the Committee and the time and trouble that went into letting us have these views. We have read and thought very carefully about all of them.

It was encouraging to hear the strong commitment to improving energy efficiency but we should note that this came largely from people and organisations that were already in the business. Energy efficiency is not terribly exciting. But it is certainly very important and probably the most crucial energy issue facing Wales. A major challenge for us and the Welsh Assembly Government is to increase the general level of interest in energy efficiency among the people of Wales.

The Committee is very grateful to the people and organisations, listed in Annex C, who took the time and the trouble to make submissions to the consultation.

We have also very much appreciated the advice and guidance from our 'Reference Group' listed in the previous report, which acted as a sounding board and source of valuable advice throughout the review. The content of the report is nonetheless the sole responsibility of the Committee.

I would also like to express the Committee's thanks to Professor Jake Chapman, who has been our expert adviser for the review and has guided us through some very complex issues. Finally, I would like to record my, and the Committee's, appreciation of the work of our Committee Clerk and Deputy Clerk, John Grimes and Siân Wilkins, and the valuable support we have all received from Gareth John in the Secretariat.

Chris Gwyther
Chair
Economic Development Committee

Membership of the Economic Development Committee

(with photographs)

Christine Gwyther (Chair)

Mick Bates

Alun Cairns

Christine Chapman

Alison Halford

Carmarthen West and South

Pembrokeshire

Montgomeryshire

South Wales West

Cynon Valley

Delyn

Andrew Davies (*Economic Development Minister*)
Ron Davies
David Ian Jones
Elin Jones
Dafydd Wigley
Phil Williams

Swansea West
Caerphilly
North Wales
Ceredigion
Caernarfon
South Wales East

This is the current membership of EDC. During the course of this part of the review David Davies, Mike German and Brian Hancock were also members of the Committee.

1. INTRODUCTION

1.1 In December 2002 the Economic Development Committee published its consultation report on energy efficiency in Wales. It pointed out that energy efficiency provides a 'win-win'. On the one hand it means that Wales uses fewer natural resources and reduces emissions of greenhouse gases. At the same time, it provides opportunities for research and, particularly local, business and jobs.

Introduction to the Consultation report:

1.1 This is the second Report of the Economic Development Committee's Energy Review. The first report was concerned with Renewable Energy and made policy recommendations to the National Assembly that would enable renewable sources to contribute to Welsh energy supplies and foster the growth of local renewable based industries.

1.2 The first report also established the context within which the Review is being undertaken. The most significant context was that of global warming and the significance of carbon dioxide emissions. It was noted that the widespread agreement among climatologists and other scientists represented at the Intergovernmental Panel on Climate Change, meant that carbon dioxide emissions had to be stabilised at a level less than half that prevailing today by the middle of this century. Even with such large reductions there would be significant changes in climate and rises in sea level.

1.3 In order to achieve the substantial reductions in carbon dioxide emissions it would be necessary to reduce energy demand (by improvements in efficiency) and obtain most electricity and some other fuels from zero-carbon sources, such as renewables and nuclear power by about the middle of the century. These were recognised as ambitious targets that required consistent action starting now and continuing over the next decades. It should be noted that energy efficiency and low carbon sources of energy are not alternatives, both are essential to achieving the required reductions in carbon emissions.

1.4 Of all the areas of energy policy energy efficiency is unique in providing a positive contribution to all the objectives of sustainable development. By using less fuel to achieve the same end result:

a. the use of natural resources is diminished

- b. emissions of greenhouse gases are reduced*
- c. the end users are better off economically, this is particularly important for households in fuel poverty*
- d. the economy is using resources more efficiently, thereby fostering economic growth*
- e. security of supply is increased since less fuel has to be provided*

1.5 One of the particular economic benefits of energy efficiency is that it can foster a virtuous cycle of local development. This comes about because the majority of the savings made through energy efficiency investments will be spent locally. The increase in local expenditure will have a beneficial effect on local business, and hence employment and general economic prosperity.

1.6 Energy efficiency is particularly important because it is only by improving the efficiency with which fuels are used that the historic relationship between economic growth and fuel use can be changed. Historically economic growth has led to increases in fuel use due to increases in industrial activity, increases in transport and personal mobility and increased standards of comfort at home and at work. Increasing wealth has also led to substantial increases in the number of households, largely through reductions in the average household size. Many of these trends are expected to continue, though the impact of industrial energy use is declining. In order that economic growth, increased standards and personal mobility do not threaten climate change it is necessary for the rate of improvement in efficiency to exceed the rate of increase in energy demand.

1.2 The Report made a number of recommendations for action by the Welsh Assembly Government. These related to supporting UK Government policy, to increasing the powers devolved to the Assembly, and to action that it could take itself.

1.3 The Committee was very pleased by the response to the consultation and is extremely grateful to those who took the time and trouble to respond to it. In keeping with the National Assembly for Wales' policy of open government, all the responses have been published on the Internet.

2. SUMMARY OF RESPONSES RECEIVED

Number of Responses

2.1 A total of 32 responses were received to the consultation. These came from a wide range of organisations and these are listed given at Annex C.

Type of Response

2.2 The Chair's letter sent out with the Report, Annex A, invited views on the Committee's recommendations and the action that could be taken to promote greater energy efficiency in Wales. A number of organisations provided detailed responses reviewing the full range of issues related to energy

efficiency, other focused on specific themes. There was one detailed response that was virtually duplicated by two organisations and supported by a third, otherwise all the responses were unique.

2.3 It should be added that persons or organisations responding to the consultation were self selected and do not constitute a random or representative sample in any statistical sense. Consequently it cannot be assumed that the respondents are in any sense representative of the population of Wales generally.

2.4 It was noticeable that the responses to this consultation exercise were significantly fewer, and reflected significantly less passion, compared with the consultation exercise on renewable energy.

3. GENERAL THEMES TO EMERGE

Nature of respondents

3.1 Perhaps the most notable feature of the responses was that all of them came from organisations, or from individuals closely involved in areas of work where energy efficiency is a key consideration. This is in sharp contrast with the consultation on renewable energy, which attracted a strong response from the general public and yet both reports were promoted and disseminated in much the same way. It is fairly easy to speculate on the reasons behind this and the fact that a number of specific issues, particularly the impact of wind farms on the visual environment has resulted in much of the interest in the report on renewable energy. But improving energy efficiency is a challenging and important issue and one which will have a significant and lasting impact on the environment. The stark question for the Committee, and for the Welsh Assembly Government, is that of *why* there is so much concern about the visual environment – and so little concern about the fundamental question of energy efficiency. We need to spend time explaining the importance of energy efficiency to the Welsh public and this consultation has been a vital building block in that process.

General Reaction

3.2 The general response to the consultation was one of whole-hearted support for the Committee's decision to undertake a review in this area and for action to improve energy efficiency throughout Wales. All respondents (apart from one which focused on a specific technical issue) supported the broad thrust of the Report. Indeed, if there was a general criticism, it was that the Report did not go far enough. A number of respondents expressed the view that energy efficiency should not be considered in isolation and that an energy policy must be integrated with policies on renewable energy, vehicle fuels, and fuel poverty. Some considered that these should be integrated with policies on sustainable development generally.

3.3 The Committee fully accepts these views and recognised early on the difficulties of addressing a subject as wide as energy in stages. However, it considered it important that the Review had regard to

the need to take urgent action on a number of issues and decided that proceeding in stages was most likely to achieve results quickly. It certainly agrees that there is far more to be done in developing the vision of Wales as an exemplar in its energy policies and in relation to sustainable development both in this sector and generally.

Leadership

3.4 A clear view came across from the responses that there was too many bodies, programmes and people involved in promoting energy efficiency and they generally appeared uncoordinated. A number of respondents agreed with the recommendation in the Report that the National Assembly for Wales should take a lead in co-ordinating and promoting this work. However, a number also added that this should not involve the establishment of a new organisation - there were too many such bodies already. Rather, the National Assembly should seek to identify within the existing people and bodies involved in promoting energy efficiency a unit that should seek to co-ordinate action.

3.5 Views were not unanimous on this front and one respondent argued for establishing a Sustainable Energy Agency to bring together work to improve energy performance and to promote renewable energy. There was also the suggestion that the Welsh Assembly Government should appoint a Minister with responsibility for all sustainable energy issues in Wales.

3.6 There were other ways suggested in which the National Assembly could give a clear lead. A major one would be through its procurement policies and by ensuring that all assessments took full account of sustainability issues and a full life time assessment of costs and benefits. This was strongly supported and taken further in several submissions which suggested that the Assembly could also educate and provide advice to its supply chains. In this way it would spread energy efficiency awareness deeper into the Welsh economy.

3.7 One submission pointed out that one of the most effective ways of improving energy standards in commercial buildings would be for the public sector to take a lead in specifying high standards. This was linked to the European Directive regarding the energy performance of buildings, which requires all buildings to have an energy assessment available at the time of sale or lease. To provide a lead in this respect the Assembly could also undertake an audit of the public sector estate in Wales and take action to improve the level of energy efficiency in buildings to the highest reasonable and practicable level.

Awareness

3.8 Alongside the role of co-ordinating action to improve energy efficiency in Wales, there was a very clear message in the consultation of a need for much greater effort to promote awareness of the need to improve energy efficiency. This point is perhaps made only too clearly by the fact referred to above that while many 'individuals' responded to the Committee's report on renewable energy only two responded to this consultation and both were people whose work involved them professionally in energy efficiency

issues.

3.9 There was a wide range of support for ‘a quantum change’ and ‘a strategic approach’ to raising awareness of the need for energy efficiency. It was suggested that a particular focus needed to be put on the domestic sector to improve knowledge of the problems arising from climate change and the very real effect that improvements in energy efficiency could deliver. These should also highlight the wider benefits that came from better home insulation such as financial savings, improved health, reduced time off work. One interesting suggestion was that there should be a major campaign in schools to increase children’s awareness of these issues. This would yield long term benefits in their own right as well as providing a direct input into individual homes. It was suggested that this might be supported by a grant scheme which offered schools small sums of money to pursue projects, within the curriculum, to allow children to understand and demonstrate energy efficiency and renewable energy schemes.

3.10 A number of responses pointed to the role of the Energy Efficiency Advice Centre Network (EEACs) and urged that this be strengthened and developed. It was felt that the Assembly could work more with the EEACs voluntary organisations working in the area given their experience and knowledge.

Domestic financial Incentives

3.11 A number of respondents commented on the lack of financial incentives for individual homeowners to insulate their homes. The Committee's Report notes that currently financial assistance is available only to people in receipt of 'passported' benefits and there was significant support in the survey for eliminating this restriction. Some respondents pointed out that there were many households who, although not in receipt of passport benefits, were nonetheless in a position where they could not afford energy efficiency improvements but were in need of the same.

3.12 It was argued in the consultation that, cynical though it might sound, human nature meant it was more likely that householders would respond to the offer of a grant to improve their domestic efficiency than any calculations about energy savings. Moreover, existing financial incentives were too fragmented, had too narrow an availability, were too limited, and nobody knew about them. Brief reference was made to the use of tax incentives in the same way and it was pointed out that these were likely to be of least value, and would not benefit those on lower incomes. It was also suggested that all grants relating to property should be conditional on high standards of energy efficiency as indicated by SAP ratings.

Commercial buildings

3.13 Several respondents pointed out that there were inadequate incentives for improvement in the commercial sector and, as mentioned earlier, suggested that the public sector should take a lead by specifying buildings of the highest energy standards. It was suggested that the BREEAM excellent

standard would provide such a measure of performance. However BREEAM is an overall environmental rating and an excellent rating can be obtained without a high-energy performance. The introduction of the European Directive on energy performance of buildings has prompted research into effective ways of measuring the energy efficiency of commercial buildings and as soon as this is available would provide a better standard for public sector buildings in Wales.

Role of Local Authorities

3.14 A number of respondents commented on the pivotal role played by local authorities in improving domestic energy efficiency. There was a strong view that this needed to be strengthened and more clearly defined. It was pointed out that the average improvements in energy efficiency in Wales, as reported through HECA, were very low and that this reflected the fact that many HECA officers also had a range of other responsibilities that limited the time they could devote to energy efficiency. Resources needed to be made available, and perhaps ring fenced, for the appointment of full-time HECA officers and for their work to be supported with more specific advice and guidance from the Assembly.

3.15 Alongside this there needed to be a much clearer focus on the setting of targets for Wales and for individual local authorities. This was essential for progress to be measurable which in turn was critical to delivering results. At the same time there was a need to improve the quality of information available in this area; the suggestion was that all Authorities should undertake surveys to establish the energy efficiency of the housing stock in its area.

3.16. One respondent pointed out that all Local Authorities would receive a windfall through the application of the Climate Change Levy (CCL) since their additional energy costs would be more than offset by the corresponding reduction in National Insurance contributions (the vehicle for recycling the CCL). It was suggested that this windfall should be set aside for investment in energy efficiency within or by the Local Authority.

New National Assembly for Wales Building

3.17 There was widespread support for the recommendation relating to the installation of photovoltaic solar panels on the new National Assembly building – but respondents considered that the Government should go further than this and make the building an exemplar of the highest level of good energy practice.

3.18 Respondents suggested that the building should use ‘zero’ energy, CHP, passive solar warming, and meet the BREEAM standard of 'excellent'. It was also pointed out that, since photo voltaic systems are largely imported into the UK, a preferable alternative would be the installation of Solar Thermal Systems which would support the solar thermal industry in Wales

Jobs and Skills

3.19 A number of respondents noted that the benefits of improved energy efficiency were not just environmental. The sector provides a wide range of opportunities for research and development into new products and is one that Wales could and should develop as a priority. This sector offers opportunities in both the development and manufacture of energy efficiency products and also in their installation. The latter is particularly important because most of these jobs would probably need to be locally based. If Wales is to obtain maximum benefit from the development in this sector then it is important that this is recognised by the economic development agencies, such as the WDA and ELWa. These agencies need to ensure that there are programmes in place to encourage the development of skills in all parts of the country to meet these needs and to encourage investment in the sector.

3.20 There is also a need to ensure that workers in all sectors of industry have an awareness of the key issues relating to energy efficiency – both to combat global warming and to achieve maximum cost effectiveness for the businesses.

Combined Heat and Power (CHP)

3.21 There was a significant level of support for the continued development of combined heat and power schemes. Respondents saw these as having an important part to play in the improved use of energy efficiency and were keen to see them developed. There was a general view that the public sector should seek to incorporate CHP schemes into new development wherever this was possible although the view was expressed that in some cases this was not a practicable option. Although industrial CHP has been severely affected by changes in gas and electricity prices this has not had such a marked effect on CHP when used in commercial and public sector buildings because retail prices have not changed as much as wholesale prices. It was suggested that the Assembly could promote CHP in public sector buildings more by providing information and training for staff.

3.22 A number of respondents expressed views in support of the Committee that NETA (New Electricity Trading Arrangements) had had the effect of imposing a penalty on CHP schemes. In contrast, Ofgem, the regulatory body responsible for this arrangement, submitted a response arguing that they did not consider NETA imposed a penalty on generation from CHP plant. They argued that the pricing arrangements "provide an incentive on all parties, in an equal and non-discriminatory manner ...". They considered that the slow uptake of CHP was mainly due to the fact that the wholesale price of electricity had decreased and this in turn had reduced the price differential between gas and electricity, making investment in CHP unattractive. The detailed operation of NETA continues to be the subject of review by Ofgem and DTI.

Building Regulations

3.23 There was a mixed response to the Committee's suggestion that consideration should be given to imposing higher energy efficiency standards through the Building Regulations as they apply in Wales. A number of respondents, arguing from the position that Wales should set an example, agreed with this. However, one or two were concerned that this might merely have the effect of driving up house prices in Wales and make Wales a less attractive place for developers to invest in. Moreover, while it might be argued that these concerns were not real but just perceptions, it was important to recognise that people's and investors' perceptions were important. The view was also expressed that the BREEAM standard had some disadvantages because it deals only with specific categories of buildings and some of its criteria are difficult to apply to some designs or locations.

3.24 The Committee very much welcomed the suggestion that Wales might adopt its own 'Green Dragon' type of certificate for developments that achieved a degree of sustainable performance in excess of minimum standards. The Welsh Assembly Government Environment Minister has already been in discussion with the construction industry and considers that the Green Dragon certificate would provide both a clear incentive to developers and a clear commitment of Wales' commitment to practical sustainability.

3.25 One suggestion was that in order to encourage higher standards of building construction, developers and builders might be offered a 'fast track' process for planning approval if their schemes had sufficiently high standards of energy efficiency and sustainability. For domestic dwellings the standard could be expressed in terms of SAP 100 or better and for commercial and industrial buildings the existing BREEAM excellent standard and in the future the standard could be set in terms of the agreed metric of energy efficiency.

4. COMMENTARY ON RECOMMENDATIONS

A. Supporting UK Policy

The Welsh Assembly Government should:

- 1. support the UK government's targets for energy efficiency by promoting energy efficiency in all areas and at all levels. (6.4)*
- 2. support the CHP strategy and encourage the UK Government to review the penalties imposed on CHP plant through NETA. (6.11, 3.17, 3.18)*
- 3. promote the schemes and support available from the Energy Saving Trust and Carbon Trust, particularly as these apply to households and firms in Wales (6.6, 6.12)*

4.1 All respondents in the consultation strongly supported these recommendations although Ofgem had reservations about the reference to the 'penalty' imposed on CHP plant through NETA. While the Committee acknowledges the technical comments made by Ofgem it is clear from the large number of responses which commented on the deleterious effect of NETA on CHP that this remains an issue. The Assembly should therefore continue to support and promote CHP and press for further changes to NETA

to positively encourage CHP.

4.2 The Committee endorses these recommendations.

B. Increasing Devolved Powers

4. *The Welsh Assembly Government should seek powers to impose higher energy efficiency standards through the Building Regulations as they apply in Wales. (6.15, 4.4(g))*

4.3 The Committee welcomed the degree of support for this recommendation but acknowledges the views expressed by a number of respondents that this could increase property prices and could have a negative effect on investment in Wales. While the Committee feels this is primarily an issue of perception, it is anxious not to create any pressures that might encourage investors to go elsewhere. It welcomes suggestion that Wales might adopt its own 'Green Dragon' type of certificate for projects that achieved a degree of sustainable performance in excess of minimum standards. This could be constructed in a way that would meet the needs and circumstances of Wales and while not having the 'bite' of a statutory requirement would provide both a clear incentive to developers and a clear commitment of Wales' commitment to practical sustainability. The Committee therefore recommends the adoption of such a certification process.

C. Action by the National Assembly

The Welsh Assembly Government should:

5. take a lead in promoting and encouraging energy efficiency across Wales – in all areas and at all levels . It should establish a mechanism to monitor and report on performance towards achieving energy efficiency targets. (6.4)

4.4 The Committee endorses this recommendation and urges the Welsh Assembly Government to consider, in particular, ways in which to involve young people and schools in this and the suggestion of some kind of grant scheme to encourage young people.

4.5 It endorses the need to set targets for local authorities and establish a mechanism to monitor and report on performance.

6. *identify an individual, or unit, responsible for coordinating and monitoring the promotion of energy efficiency on a Wales-wide basis (6.7)*

4.6 The Committee endorses this recommendation with the proviso that this should be achieved from within the existing organisations already in the field and not by establishing a new organisation.

7. ensure that full and careful consideration is given to the installation of photovoltaic solar panels

on the new National Assembly Building. (6.9)

4.7 In making this recommendation originally, the Committee was mindful of the fact that at this relatively late stage in the design of the building there might be practical constraints on what it was possible to do. The consultation has given a clear message that the Assembly should seek to go further than the Committee originally thought and should seek to construct a building that was an exemplar and a clear statement of Wales' commitment to sustainable development. The Committee very much endorses this view and urges the Welsh Assembly Government to examine every aspect of energy use within the new building and to ensure that, as far as is practicably possible, it is an exemplar of best practice.

8. *deploy additional resources, for example Objective 1 funds, to support local energy efficiency initiatives. (6.10, 4.4 (d))*

4.8 The Committee endorses this recommendation which was explicitly supported by several respondents. One went so far as to suggest that sustainability be made a prerequisite for Priority 1 Measure 5 and Priority 6 Measure 3.

9. *make use of its procurement policy to support and promote energy efficient products and ensure that all purchases are based on a life-cycle cost assessment. (6.10, 4.4 (c))*

4.9 The Committee endorses this recommendation and accepts that the use of procurement in the public sector is an excellent route for improving the energy awareness of suppliers of all goods and services. It also agrees with the respondents who suggested that the Assembly should use procurement to provide support and education for the complete supply chains and encourage other public bodies to do the same throughout Wales.

10. *promote the use of CHP in all public sector buildings and, where necessary, encourage the provision of the necessary training and expertise (6.10, 3.28)*

11. *use its resources and influence to ensure that all public buildings, including schools and council buildings, have the highest possible standards of energy efficiency. The Assembly should also explore ways of supporting additional construction costs through the savings available to users. (6.8, 6.12, 4.4(f),)*

4.10 The Committee notes the concerns that there might be limitations to what can be done to improve energy efficiency in older buildings, but subject to this endorses these two recommendations.

12. *explore all possible routes for providing additional incentives and financial support to encourage householders to improve the insulation of their properties (6.16)*

4.11 The Committee strongly endorses this recommendation - there is clear evidence from the consultation of the need to provide a clear incentive to householders. It emphasises in particular the need

for these to be available to all householders and not just those in receipt of ‘passported’ benefits

13. *work with Authorities, both officers and elected members, to raise the profile of HECA and ensure the allocation of adequate resources to discharge obligations under the Act (6.20, 4.4(a))*

4.12 The Committee endorses this recommendation.

14. ensure that ELWa and other bodies are providing the training required to support energy efficiency initiatives, particularly for construction. (6.18, 4.4(h))

4.13 A number of respondents commented on the wide economic opportunities that can come from energy efficiency. This recommendation focused on the need to provide adequate levels of training to support improvements in energy efficiency, particularly for construction. This is an important and probably the main part of the sector where there are direct employment opportunities. Nonetheless, the Committee recognises the opportunity for the manufacturing sector and as well as endorsing the recommendation recommends that bodies such as the WDA should also see this as a priority.

5. CONCLUSION AND SUMMARY OF RECOMMENDATIONS

The Committee must express its thanks to everyone who has contributed to the consultation. It very much welcomed the wide range of views presented and the careful and thoughtful analyses put to us.

In the light of these our final conclusions and recommendations are:

A. Supporting UK Policy

The Welsh Assembly Government should:

1. support the UK government’s targets for energy efficiency by promoting energy efficiency in all areas and at all levels.
2. support the CHP strategy and encourage the UK Government to review the penalties imposed on CHP plant through NETA.
3. promote the schemes and support available from the Energy Saving Trust and Carbon Trust, particularly as these apply to households and firms in Wales.

B. Increasing devolved powers

4. The Welsh Assembly Government should develop and adopt its own 'Green Dragon' type of certificate for buildings that achieved a degree of sustainable performance in excess of minimum standards.

C. Action by the National Assembly

The Welsh Assembly Government should:

5. take a lead in promoting and encouraging energy efficiency across Wales - in all areas and at all levels. It should establish a mechanism to monitor and report on performance towards achieving energy efficiency targets. It should consider, in particular, ways in which to involve young people and schools in this and the suggestion of some kind of grant scheme to encourage young people.
6. identify from within the existing organisations and people involved in this work an individual, or unit, responsible for coordinating and monitoring the promotion of energy efficiency on a Wales-wide basis.
7. should seek to construct the new National Assembly Building as an exemplar and a clear statement of Wales' commitment to sustainable development. It should ensure that full and careful consideration is given to every aspect of energy use within the new building and ensure that, as far as is practicably possible, it is an exemplar of best practice.
8. deploy additional resources, for example Objective 1 funds, to support local energy efficiency initiatives.
9. make use of its procurement policy to support and promote energy efficient products and ensure that all purchases are based on a life-cycle cost assessment. It should also use this policy to improve the energy awareness of suppliers of all goods and services and encourage all other public bodies to do the same throughout Wales.
10. promote the use of CHP in all public sector buildings and, where necessary, encourage the provision of the necessary training and expertise.
11. use its resources and influence to ensure that all public buildings, where practicable, including schools and council buildings, have the highest possible standards of energy efficiency. The Assembly should also explore ways of supporting additional construction costs through the savings available to users.
12. explore all possible routes for providing additional incentives and financial support to encourage all householders, not just those in receipt of passported benefits, to improve the insulation of their properties.
13. work with Authorities, both officers and elected members, to raise the profile of HECA and ensure the allocation of adequate resources to discharge obligations under the Act.
14. ensure that ELWa and other bodies recognise the economic opportunities that this sector presents and consider it as a priority. This should include, in particular, providing the training required supporting

energy efficiency initiatives, particularly for construction.

ANNEX A – CHAIR’S INVITATION LETTER TO CONSULTATION.

Pwyllgor Datblygu Economaidd
Economic Development Committee
Bae Caerdydd / Cardiff Bay
Caerdydd / Cardiff
CF99 1NA
Eich cyf / Your ref:
Ein cyf / Our ref:

18 December 2002

REVIEW OF ENERGY POLICY IN WALES CONSULTATION REPORT ON ENERGY EFFICIENCY

I enclose a copy of the Economic Development Committee’s consultation report on Energy Efficiency. This is the second report in the Committee’s Review of Energy policy in Wales. The first was a consultation report on Renewable Energy – and we will shortly be publishing the final report on that phase of the Review.

In this report we focus on an issue which in many ways is the most important aspect of any energy policy: how we use energy – or more particularly how we waste it.

It is estimated that at the UK level there is scope to reduce energy use by more than 30% - about £12bn of savings. It is not easy to translate this into a figure for Wales, but allowing for the fact that we have a higher proportion of heavy industry than the UK, and a lot of housing with solid walls, it must be around £1bn. There is therefore a lot of scope to make energy savings in Wales and this is what our report addresses.

This involves all of us. Government can only set the framework and offer encouragement and incentives. Ultimately it comes down to all of us to change the way we live and the way we do things. And if we reduce energy consumption – we will not only reduce emissions of carbon into the atmosphere and global warming – we will save money. It is a win-win.

In the Review we have made 14 recommendations about what the Welsh Assembly Government can and should do to promote greater energy efficiency in Wales. We welcome your comments and views on these. We would be particularly interested in knowing what practical steps you can take to further this important work and what the National Assembly can do to help. Is the main issue a lack of resources?

Or is what is needed better and clearer information? Are the sources of information clear enough or are there too many bodies operating in this field?

Could I please have your response by Friday 21 February.

We welcome responses in Welsh or English and these can be sent in hard copy or electronically.

Letters should be addressed to:

Gareth John
Committee Secretariat
National Assembly for Wales
Cardiff Bay
CARDIFF
CF99 1NA

e-mail responses should be sent to the Committee's electronic mail box:

Economic.comm@wales.gsi.gov.uk

Further copies of the report are available on request from Gareth John on 029 2089 8429.

As part of the National Assembly's commitment to openness, we will place copies of written responses in the National Assembly's libraries and will make them available to the public on request. Please indicate if you wish your response or any part of it, not to be made publicly available.

If you need any further information please contact the Committee's Clerk John Grimes on 029 2089 8225 or its Deputy Clerk Sian Wilkins on 029 8029 8224.

I look forward to hearing from you.

Yours sincerely



Christine Gwyther AM
Chair, Economic Development Committee

ANNEX B - GLOSSARY OF TERMS FOR ENERGY EFFICIENCY

The Glossary is arranged in alphabetical order for quick reference. After each set of initials is an expansion with (where appropriate) an approximate phonetic pronunciation. The explanations given are necessarily brief.

BRE – Building Research Establishment

a research centre that used to be part of the Department of Environment. It is now an independent body and continues to carry out authoritative work on a range of issues, including energy use in the UK.

CCGT – Combined Cycle Gas Turbine

. This refers to an electricity generator that makes use of both a gas turbine (using hot gases from gas combustion) combined with a steam cycle (where steam drives a turbine, the steam being heated by the gases exhausted from the gas turbine). This is the most popular form of electricity generation in modern power stations and in large scale modern CHP plant.

CHP – Combined heat and power

the production of heat and electricity in a single plant or unit. The technology, and its advantages, is explained in more detail in Annexe C.

Econ 19 –

The Energy Consumption Guide No. 19 (Energy Use in Offices). This is a publication put out by the Building Research Establishment's best practice publications.

GJ – Gigajoule

. This is a unit of energy equal to 10^9 Joules. One GJ is also equal to 277.7 kWh

GWh – Giga-watt hour

. A GWh is a measure of energy. One GWh equals a million kWh (kilo-watt-hours) or 10^9 Wh. A 1MW device operating continuously for a year will produce 8.76 GWh of electricity.

HECA – Home Energy Conservation Act.

This places an obligation on all Local Authorities to devise schemes to improve the energy efficiency of all housing within their domain by 30%.

NETA – New electricity trading arrangements

(pronounced knee-ta). The new trading system is based on long term contracts between generators (producers of electricity) and suppliers (companies that sell to consumers). If either party to the contract is "out-of-balance" then they have to pay penalty fees. Thus if a generator produces less than contracted or a supplier sells more than contracted then they have to pay for the difference at a rate determined by the operator of the system (National Grid plc). To date the out of balance charges have been extremely high (twice the contract price). This unduly penalises intermittent generators since they cannot guarantee a level of supply. As a result CHP generators and renewable generators have been severely disadvantaged. Ofgem have recognised this and there is a working party looking at how to resolve the issue.

PIU – Performance and Innovation unit.

A unit established within the Cabinet Office to carry out studies on issues that cut across traditional departmental boundaries.

PJ – Petajoule.

A petajoule is a measure of energy equal to 10^{15} Joules. 1 PJ is also equal to 277.7 GWh or 0.277 TWh.

RSL – Registered Social Landlord

. The majority of Registered Social Landlords are Housing Associations.

TWh – Tera-watt-hours

. A tera-watt-hour is a unit of energy. One TWh equals a thousand GWh (see above), a billion kWh (kilo-watt-hours) or 10^{12} Wh (watt hours). The UK as a whole consumes about 200 TWh of electrical energy per year.

ANNEX C - PERSONS AND ORGANISATIONS RESPONDING TO THE CONSULTATION

1. Wales TUC
2. Countryside Council for Wales
3. Association for the Conservation of Energy

4. CBI Cymru
5. Wales Tourist Board
6. Snowdonia National Park Authority
7. Nuair Group Ltd
8. National Energy Action
9. Chris Le Breton
10. North Wales Energy Efficiency Advice Centre

11. Welsh Consumer Council
12. Caerphilly County Borough Council
13. West Wales Eco Centre
14. Carbon Trust Wales
15. Power Electronics Design Centre, University of Wales, Swansea
16. Carmarthenshire County Council
17. Buildings Research Establishment
18. Energy Savings Trust Wales
19. Mid & West Wales Energy Efficiency Advice Centre
20. Welsh School of Architecture, University of Wales Cardiff

21. Vale of Glamorgan County Council
22. South Wales HECA forum
23. Ofgem
24. South East Wales Energy Efficiency Advice Centre
25. The National Trust (Wales)
26. Royal Society for the Protection of Birds (Wales)
27. Friends of the Earth Cymru local groups Network
28. Welsh Development Agency
29. WWF Cymru
30. Welsh Local Government Association

31. Campaign for the Protection of Rural Wales
32. Henry Uniacke / Friends of the Earth Cymru

The full responses are available on the internet at: <http://www.wales.gov.uk/.....>

(or via the links from the Economic Development Committee home page on www.wales.gov.uk)