



## **Betws GG - Community Ground Source Heating Proposal: Well-being Impact Assessment Report**

This report summarises the likely impact of the proposal on the social, economic, environmental and cultural well-being of Denbighshire, Wales and the world.

**Assessment Number:** 1084

**Brief description:** The installation of a ground source heating system providing district heating from a renewal source for the community of Betws GG

**Date Completed:** [TEXT HERE] Version: 0

**Completed by:** [TEXT HERE]

**Responsible Service:** Facilities, Assets & Housing

**Localities affected by the proposal:** Dee Valley,

**Who will be affected by the proposal?** Home owners & Denbighshire Housing tenants

**Was this impact assessment completed as a group?** No

## **Summary and Conclusion**

Before we look in detail at the contribution and impact of the proposal, it is important to consider how the proposal is applying the sustainable development principle. This means that we must act "in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs."

### **Score for the sustainability of the approach**

**3 out of 4 stars**

**Actual score : 35 / 36.**

### **Summary for each Sustainable Development principle**

#### **Long term**

The proposal places sustainability at its core as it will provide renewable a heating source to all residents in the village of Betws GG. The project will ensure that the village of nearly 70 homes becomes considerably less reliant on the grid as their heating demands will be delivered via ground source bore holes supplemented by heat pumps which greatly reduces the amount of electricity required to provide heating. The project will also include retrofit improvement works to the council housing properties to provide increased insulation to our homes and solar panel insulations to supplement the heat pumps, again reducing the demands of grid electricity in the village.

#### **Prevention**

The project is a major flagship innovative energy project centralised around the Welsh Governments commitment to reduce the amount of carbon generated from the housing stock. The proposal builds independence considerably as residents will become less reliant on grid and fossil fuels, the project will provide a long term sustainable heating infrastructure for the community. Less pressure and demand will be exerted on public services as their will be less demand on the grid and homes will conserve heat better due to the installation of increased insulation measures. The project actively promotes new technologies designed to reduce climate change positively which has an expected lifecycle in excess of 100 years.

#### **Integration**

## Betws GG - Community Ground Source Heating Proposal

Denbighshire County Council is committed to reducing the amount of carbon which our properties create, this unique project will build on this priority and include the wider owner occupier housing stock in the village as well. The project will also deliver priority repairs as identified as part of our asset management plan which are resilient and sustainable, thus ensuring our homes remain compliant with the WHQS. SAP scores will significantly increase in line with local targets and the Welsh Governments decarb target as direct result of the project. Reduced fuel bills for residents will help towards overall promoting good health and well being thus reducing the stain on our public health services. The infrastructure can also be extended in the village therefore provide flexibility for future development should the local development plan allow.

### **Collaboration**

The project is reliant on collaboration across several organisations including the council, the community council, utility providers and the infrastructure provider itself. The proposal is a long term project, therefore ensuring the project is monitored and maintained is a core requirement to ensure longevity. The project will provide a significant positive economic outcome beyond 2050 as the heating systems, combined with other forms of renewable power including solar panels will reduce residents fuel bills for future generations to come. The positive environmental outcome of the project will also be measured in the future as we install technologies able to track and report on the performance of the installations.

### **Involvement**

The project has been developed taking into consideration all relevant stakeholders and designed in accordance with national regulation using professional personnel from within the council thus ensuring full public engagement from the outset. Collaboration is key to the success of this project to ensure that all residents benefit from the project now and in the future, a clear road map has been developed by our corporate communications teams and several stakeholder events have been planned to promote and educate residents from within the village. The contractor who is highly experienced in this sector is also actively involved with our stakeholder engagement plan and will provide support during the lifetime of the project.

### **Summary of impact**

## Betws GG - Community Ground Source Heating Proposal

<b>Well-being Goals</b>	<b>Overall Impact</b>
<a href="#">A prosperous Denbighshire</a>	Positive
<a href="#">A resilient Denbighshire</a>	Positive
<a href="#">A healthier Denbighshire</a>	Positive
<a href="#">A more equal Denbighshire</a>	Positive
<a href="#">A Denbighshire of cohesive communities</a>	Positive
<a href="#">A Denbighshire of vibrant culture and thriving Welsh language</a>	Neutral
<a href="#">A globally responsible Denbighshire</a>	Positive

### **Main conclusions**

Carbon reduction to the housing stock

Increased employment opportunities

Increased training opportunities

SME and local supply chain benefits

Skill development

Tenant engagement

Community involvement

## **The likely impact on Denbighshire, Wales and the world.**

### **A prosperous Denbighshire**

#### **Overall Impact**

Positive

#### **Justification for impact**

The project will develop a sustainable housing stock and in doing so develop new skills within the construction sector

#### **Further actions required**

Negative impacts are minimal, continuity of work could be resolved by future potential similar projects being considered in other areas on the successful completion of this pilot

#### **Positive impacts identified:**

##### **A low carbon society**

The project embeds a low carbon society as its core objective. This will include heat pumps, solar panels and increased thermal efficiency works

##### **Quality communications, infrastructure and transport**

Improved energy infrastructure

Improved energy data via new technology

##### **Economic development**

Increased employment opportunities

Increased training opportunities

Use of local supply chain

##### **Quality skills for the long term**

New skills developed in the renewable sector and retrofit industry,

increased integration with local colleges

### **Quality jobs for the long term**

Job creation for the duration of the framework for local SMES

New sector jobs in a growing industry of renewable technology

### **Childcare**

N/A

### **Negative impacts identified:**

#### **A low carbon society**

There are no perceived negative impacts

#### **Quality communications, infrastructure and transport**

There are no perceived negative impacts

#### **Economic development**

There are no perceived negative impacts

#### **Quality skills for the long term**

There are no perceived negative impacts

#### **Quality jobs for the long term**

Job creation may not extend beyond the framework

### **Childcare**

N/A

#### **A resilient Denbighshire**

## **Overall Impact**

Positive

## **Justification for impact**

The impact will have a long term positive impact as the environmental will be aesthetically improved as a result of the work and provide a platform for biodiversity to thrive. The project will entice local SME's therefore reduce carbon by maintaining local supply links

## **Further actions required**

Encouraging the use of locally sourced materials where ever possible. Offsetting carbon creation by planting trees via a community benefit scheme during the lifetime of the project.

## **Positive impacts identified:**

### **Biodiversity and the natural environment**

Wildlife habitats will be preserved and enhanced by the work by installing temporary bird/bat boxes which will encourage biodiversity

### **Biodiversity in the built environment**

As above , similar arrangements will be Incorporated for the built environmental as well as the natural environment

### **Reducing waste, reusing and recycling**

Site waste material will be recycled and subject to contractor KPI

### **Reduced energy/fuel consumption**

The contract will entice local SME's, thus reducing fuel and transport costs, the local supply chain will be favoured to procure building materials

### **People's awareness of the environment and biodiversity**

Contractor training

increased integration with colleges

Resident information enhanced

### **Flood risk management**

New rainwater goods and drainage systems will channel rainwater more effectively thus reducing flooding risk

### **Negative impacts identified:**

#### **Biodiversity and the natural environment**

Some habitats will be impacted for a short duration of time while works are underway

#### **Biodiversity in the built environment**

Some habitats will be impacted for a short duration of time while works are underway.

#### **Reducing waste, reusing and recycling**

Some hazardous material will have to be disposed of in accordance with the law which may go to landfill

#### **Reduced energy/fuel consumption**

Some materials are not manufactured locally, therefore some carbon will be created from their supply

### **People's awareness of the environment and biodiversity**

There no negative impacts in this regard

### **Flood risk management**



There no negative impacts in this regard

## **A healthier Denbighshire**

### **Overall Impact**

Positive

### **Justification for impact**

Overall the benefits of improved housing standards create a positive impact on peoples health and well being and less demand on other public services including the NHS.

### **Further actions required**

There are no negative impacts resulting from the project which require mitigating.

### **Positive impacts identified:**

#### **A social and physical environment that encourage and support health and well-being**

The project will deliver homes that are fit for purpose, fuel efficient, warm and healthier places to live

#### **Access to good quality, healthy food**

The reduction in energy costs for residents will reduce fuel poverty therefore allowing tenants to have more money to spend on good quality food.

#### **People's emotional and mental well-being**

Lower levels of fuel poverty will reduce anxiety therefore potentially have a positive impact on mental well being

#### **Access to healthcare**

Improved housing will improve peoples health therefore create less strain on the healthcare system

### **Participation in leisure opportunities**

More money in peoples pockets from reduced household bills could be invested into leisure opportunities for families living in social housing.

### **Negative impacts identified:**

#### **A social and physical environment that encourage and support health and well-being**

There are no negative impacts in this regard

#### **Access to good quality, healthy food**

There are no negative impacts in this regard

#### **People's emotional and mental well-being**

There are no negative impacts in this regard

#### **Access to healthcare**

There are no negative impacts in this regard

#### **Participation in leisure opportunities**

There are no negative impacts in this regard

#### **A more equal Denbighshire**

#### **Overall Impact**

Positive

#### **Justification for impact**

The impact for a more equal Denbighshire is significant as homes will become more standardised, efficient and more desirable places to live. Training opportunities could also potentially be offered to tenants who express an interest in the project to learn new skills which potentially will have a direct positive socio-economic advantage within the region.

### **Further actions required**

There are no negative impacts to mitigate in this regard.

### **Positive impacts identified:**

**Improving the well-being of people with protected characteristics. The nine protected characteristics are: age; disability; gender reassignment; marriage or civil partnership; pregnancy and maternity; race; religion or belief; sex; and sexual orientation**

The work will ensure our homes are future proofed for all people in the protected groups ensuring they feel safe and settled in their surroundings

### **People who suffer discrimination or disadvantage**

The project will generate homes which are neutral for all protected groups to benefit from in terms of low cost housing accommodation.

### **People affected by socio-economic disadvantage and unequal outcomes**

The project will develop existing housing stock in deprived areas therefore creating a more equal society.

### **Areas affected by socio-economic disadvantage**

The work will encourage healthier lifestyles as homes improve so does peoples general health and well being, new skills can be developed with residents who could directly benefit from training opportunities as part of the project.

### **Negative impacts identified:**

**Improving the well-being of people with protected characteristics. The nine protected**

**characteristics are: age; disability; gender reassignment; marriage or civil partnership; pregnancy and maternity; race; religion or belief; sex; and sexual orientation**

There are no negative impacts in this regard

**People who suffer discrimination or disadvantage**

There are no negative impacts in this regard

**People affected by socio-economic disadvantage and unequal outcomes**

There are no negative impacts in this regard

**Areas affected by socio-economic disadvantage**

There are no negative impacts in this regard

**A Denbighshire of cohesive communities**

**Overall Impact**

Positive

**Justification for impact**

The project will deliver over £1M worth of investment in to warmer homes with reduced on grid energy reliance and significantly improve the visual aesthetics of our housing estates.

**Further actions required**

There are no required mitigation works in this regard to consider.

**Positive impacts identified:**

**Safe communities and individuals**

The project will deliver safe housing within Denbighshire fully complaint

with the WHQS

### **Community participation and resilience**

Tenants will be informed and engaged with as part of the scheme to ensure their voices are heard and training provided where necessary

### **The attractiveness of the area**

The work will dramatically improve the aesthetics and desirability of the county's housing estates

### **Connected communities**

The project will engage and encourage connected communities via community benefit schemes and integration with local community groups

### **Rural resilience**

The project will deliver off grid power supplies and reduced on grid energy demand, which has a positive impact to homes currently not connected to the gas network as alternative heating systems will now be viable as a direct result of the works.

### **Negative impacts identified:**

#### **Safe communities and individuals**

There are no negative impacts in this regard

#### **Community participation and resilience**

There are no negative impacts in this regard

#### **The attractiveness of the area**

There are no negative impacts in this regard

### **Connected communities**

There are no negative impacts in this regard

### **Rural resilience**

There are no negative impacts in this regard

### **A Denbighshire of vibrant culture and thriving Welsh language**

#### **Overall Impact**

Neutral

#### **Justification for impact**

As the project is construction related project only a neutral impact is deemed achievable, however improvements in this area will be discussed with successful contractors during each phase of the project.

#### **Further actions required**

This will be reviewed throughout the lifetime of the project and improvements adopted in negotiation with each successful contractor.

#### **Positive impacts identified:**

##### **People using Welsh**

Contractors selected for the project will offer all communication bilingually therefore encouraging people to embrace the language

##### **Promoting the Welsh language**

The project will endeavour to promote the Welsh language through tenant liaison and contractor involvement

### **Culture and heritage**

Home will be improved taking into consideration the local area and will be sympathetic to original designs

### **Negative impacts identified:**

#### **People using Welsh**

There are no negative impacts in this regard

#### **Promoting the Welsh language**

There are no negative impacts in this regard

### **Culture and heritage**

There are no negative impacts in this regard

### **A globally responsible Denbighshire**

#### **Overall Impact**

Positive

#### **Justification for impact**

The project aims to deliver homes which reduces carbon and improves energy efficiency to meet both corporate and national WG decarb targets for social housing.

#### **Further actions required**

Carbon off setting by planting trees through community benefit schemes will be promoted during the life time of the project as well as other suitable innovative mitigation measures during the project.

#### **Positive impacts identified:**

### **Local, national, international supply chains**

The use of local supply chains will be encouraged to reduce carbon wherever possible.

### **Human rights**

Contractors will be obliged to ensure they remain within the law when conducting construction related activities for the council.

### **Broader service provision in the local area or the region**

No broader services will not be affected as a direct result of this project.

### **Reducing climate change**

The project centres around energy efficiency and carbon reduction across the housing stock.

### **Negative impacts identified:**

#### **Local, national, international supply chains**

Some materials can only be purchased via national/global supply routes.

#### **Human rights**

N/A

#### **Broader service provision in the local area or the region**

There are no negative impacts in this regard

#### **Reducing climate change**

There are no negative impacts in this regard