

## **Monmouthshire Housing Group**

### **Environmental Report**

**1 November 2016 – 31 October 2017**

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## **Monmouthshire Housing Group**

### **Corporate**

#### **Environmental Report 1 April 2017– 31 March 2018**

##### **1. Scope**

Monmouthshire Housing Group own 3733 Rented properties 247 Leasehold properties throughout a large geographical area. Our environmental responsibility is therefore considerable and set to increase further. We intend to lead by example and encourage our stakeholders to value and protect the environment. Monmouthshire Housing Group is committed to reduce its impacts on the environment

The scope of work includes:

The management and administration of affordable homes; including property maintenance, repairs and estates management, maintenance of sewage treatment plants, and new build activity that relate to Monmouthshire Housing Group which includes:

- Monmouthshire Housing Association
- Capsel

Our Environmental Manual describes the key elements of the EMS and describes how our activities meet the requirements of the ISO 14001 and Green Dragon standard. This process is supported by our Environmental Management System (EMS) with specific documents and associated procedures which are written and implemented to ensure we have sufficient environmental control.

##### **2. Monmouthshire Housing Group Environmental Policy**

See attached copy of signed policy

##### **Achievements**

During this reporting period Monmouthshire Housing Group has:

Been successful during the recent external Health and Safety annual audit. We have made the transition from BS 18001 to ISO 45001 standard (Health & Safety). BS18001 will be withdrawn in 2021 and replaced by ISO 45001, MHA have been working towards this new standard over the past 12 months and in doing so have achieved this certification early. We will continue to embed the requirements of the new standard. ISO 45001 is designed to prevent work-related injury and ill-health and to provide safe and healthy workplaces. It also aligns itself with the other accreditations that Monmouthshire Housing Group have achieved such as ISO 14001 (Environmental) and ISO 9001 (Quality). The external audit was

conducted over a four day period and included a thorough check of our management system procedures and documentation to verify whether our systems remain effective and compliant. The auditor also visited one of our construction sites, sewage treatment plants and responsive work tasks. The auditors interviewed staff to verify they understood the various processes and procedures in place.

Monmouthshire Housing Group were also successful during the recent Environmental ISO 14001:2015 surveillance visit – March 2019.

They also were recertified to the Environmental Green Dragon (Welsh Standard) level 5 recertification in December 2018

### **3. Management Review/Objectives and Targets**

Monmouthshire Housing Group completed their Management Review in June 2019. The Management Review was attended by senior managers and Operation Sub group members. The review included an evaluation of progress towards objectives and targets and compliance with environmental legislation.

Environmental objectives have progressed exceptionally well and we have surpassed many of our targets set such as:

2018/19 Environmental Objectives	Update	Status
1. Minimise pollution risk and avoid preventable pollution.	This is a continuing objective. STP management programme in place. Gwehelog reed bed works completed Summer 2018	
2. To reduce energy consumption and make a further 10% CO2 saving to be achieved from March 2017 - 2022 = CO2 saving A further 5% on 2017 latest figure.	Programmes ongoing however CO2 reduction measures are becoming increasingly difficult as MHA have made significant progress during last few years in regard to the overall upgrade of the assets, including EPC (EWI, doors and windows, Boilers, Solar energy etc – We will continue to research any new renewable technologies	
3. Improve waste management practices on all sites	Asbestos waste storage locations have been identified and now being monitored.	
4. Increase staff environmental awareness	Environmental awareness is mandatory training for ALL staff.	
5. Improve transport efficiency. Introduce two electric cars	Completed April 2018. Two cars in place.	
6. Delivering the "Start Up / Slim Down" project – a Joint project between MHA and the Welsh School of Architecture (Cardiff University)	Programmes have commenced and are near completion.	

Monmouthshire Housing Group take into consideration the issues associated with sustainable development when setting objectives and targets and a number of our current objectives have social and economic benefits for our tenants and the local community such as Photovoltaics (PV) and external wall installation.

#### 4. Environmental Aspects and Impacts

All Environmental Aspects and Impacts that result from Monmouthshire Housing Group's activities and services have been identified. A documented register of environmental Aspects and Impacts is maintained which includes an evaluation methodology that determines the significance of each aspect. Aspects are given a red, yellow or green priority status that denotes their significance. **The most significant aspects are waste, transport and utility consumption.**

Monmouthshire Housing Group is committed to the prevention and avoidance of the release of pollutants that may cause environmental damage to air, land or water and to minimise and eliminate noise pollution where practicable.

An Environmental Impact assessment (EIA) has been completed for construction sites, sewage treatment plants and HQ. This details the controls that we have in place to manage any emergency incidents. An EIA will be rolled out to other areas such as responsive work activities.

Control measures in place include spill kits, secondary containment for chemicals and oils, robust reporting procedures and training awareness sessions for relevant employees.

We have a number of Sewage Treatment Plants (STPs) located within our estate. We have a robust service regime in place and permits are well maintained. We monitor this contract closely and meet regularly with our specialist service contractor to discuss performance. Environmental Impact Assessments have been conducted on the high value STPs.

Our average waste saving during this reporting year is 42%, all other waste is diverted from landfill and sent for incineration at an RCF facility which has a positive impact on the environment.

Hazardous waste is controlled and all documentation is in place.

Control measures are identified for all aspects where possible and the annual Objectives and Targets are linked directly to the most significant aspects. The Monmouthshire Housing Group Pollution Prevention Plan has been superseded by the Environmental Impact Assessment document (EIA). This covers all areas that are recorded on the Aspects register and is also formulated to take into account relevant aspects.

The environmental Aspects and Impacts register is reviewed annually and takes into account the results of any changes to the organisation, results of internal audits, planned inspections, any new or amended legislation, non-conformances and emergency incidents.

Procedures within the Environmental, Health and Safety management system are reviewed and updated on a regular basis in light of any legislation or best available practice.

Facilities & Compliance have an internal audit schedule in place and regularly conduct audits to test the effectiveness of our policies and procedures. In addition to this MHA have independent auditors (who carry out audits of high risk areas within the business to ascertain the effectiveness of MHA control measures).

## **5. Compliance Obligations**

Monmouthshire Housing Group are compliant with all relevant environmental legislation. We maintain a documented register of environmental legislation which is reviewed on a regular basis and updated where necessary with any new or amended legislation. Monmouthshire Housing Group has obtained all required licences and registrations. All legal records such as waste transfer notes and hazardous waste consignment notes are kept on file for the required periods. These are closely monitored and inspected on a regular basis

## 6. Monmouthshire Housing Group Environmental Performance

This year we have:

- Retained Green Dragon level 5 and ISO14001 certification following independent external audits and verification, demonstrating our own commitment to achieving the highest possible environmental standards as an organisation. We have achieved certification to the 2015 revised standard.
- Continued to achieve waste savings – Our average during this reporting year is 42%
- We have achieved transport savings over the past few years however this is now beginning to plateau
- Continued to achieve CO<sub>2</sub> savings. The original target was 42% by 2017. Our revised target is to reduce CO<sub>2</sub> by a further 10% in 2024. Currently we have achieved 45.80%. This will now become harder to achieve as we have already carried out extensive work to our stock. The recent refurbishment programme at Oakley Way has also contributed to our CO<sub>2</sub> savings.

We have achieved savings through reducing carbon dioxide (CO<sub>2</sub>) emissions by continuously improving the energy efficiency of the properties Monmouthshire Housing Group construct and manage by the various ongoing planned maintenance programmes currently in place which include:

- PV installation
- External wall Insulation
- Roof replacement
- Boiler replacement
- Air source heat pumps

## Development Update

Monmouthshire Housing Association (MHA) are undertaking an ambitious Development programme which we hope will deliver up to 700 new homes by 2022. Sustainable development is at the heart of all our business decisions and wherever possible we are using best available technologies within our properties. Development seek to maximise existing and new technologies to reduce our CO2 footprint.

Building Regulations dictate that new housing developments are designed to minimise their impact on the environment in terms of running costs.

All of our new developments are carefully designed to ensure they have a positive impact on the surrounding environment. All of MHA's new affordable properties are built to meet Welsh Governments DQR compliance. The properties will benefit from level access, wide doorways, private gardens and much more to ensure these properties are lifetime homes and easily adaptable for our tenants. Consultation and community involvement has become an integral part of the development process and we are continually looking for ways to involve communities in what we do.

Two of MHA's latest developments are funded through Welsh Government's Innovative Housing Programme (IHP). The developments consist of two separate infill housing projects designed by Cardiff University Welsh School of Architecture. They were designed to respond to and meet the needs of an older generation of people in Monmouthshire who wanted to 'down-size' from larger properties, and a much younger generation who were looking for their first property and starting out on their property journey. Both groups had been identified as requiring homes that MHA were not able to provide from their extensive stock.

Two sites, one located in Caldicot and one in Abergavenny, were selected from a number of depleted, brownfield garage sites for the development of 4 houses on each site. The location was important for both projects as they needed to be in close proximity to local amenities.

Working closely together, MHA and Cardiff University came up with two different single bedroom house types; a terraced mews with patio aimed at people under the age of 35 and an 'interlocking' courtyard bungalow for older people. The designs were developed from precedent studies and market research in response to needs for spaciousness, flexible design and manageable private outside amenity spaces. The designs were created to be flexible, so that they could be easily adapted to convert the one bedroom properties into a two bed, whilst still using the same footprint of the building.

The houses are traditional construction and have been designed to achieve a high rating of thermal performance and energy efficiency. Each home has been built to be highly sustainable and with a Standard Assessment Procedure (SAP) in excess of 100. These energy efficient properties will provide lower bills for our tenants, as well as having a lesser impact on the environment. Throughout both projects, MHA used local contractors and suppliers where possible to reduce the carbon footprint of these developments. MHA used sustainable products, such as bamboo flooring, to reduce the use of plastic but still providing a high quality finish.

MHA are very proud that we used our own workforce to procure and construct the IHP developments. Our Building Services department received specific training from local companies on certain parts of the development, for example the integrated solar PV panels.

In addition to these developments we have started construction of the following:

37 Houses at Oakley Way Caldicot

3 Houses in Tintern

The developments are highly energy efficient, provide adequate storage for recycling and implement water saving devices where practical. Both of these schemes incorporate PV Technology to minimise their impact on the environment.

The department seek to use local contractors and consultants and are fully aware of our environmental objectives. This assists in reducing fuel usage and lowers MHA's CO2 footprint. We look to develop in areas that has potential for schemes to be completed the same time, again minimising CO2 footprint and construction impact to that area.

Environmental impact assessments and archaeology surveys have been required on past projects and the details have been discharged by the local authority.

The development team is currently preparing for the new SuDS requirements as part of any future planning applications made from January 2019. This new requirement will improve biodiversity, amenity, water quality and quantity.

### **Refurbishment/Upgrade Programmes**

During this financial year we have improved our housing stock within our estate. The planned refurbishment programme at Oakley Way is now complete. One of the aims of the programme was to improve the energy efficiency of the properties. This will improve individual thermal comfort and also environmental carbon footprint impact. This is contributing to tenant's well-being and living environment. The work carried out has included; External wall insulation, new roofing, double glazing and renewal of loft insulation. We have received positive feedback from tenants and others. This encourages people to continue to live in the area by improving their environment. We are continuing to provide high quality and desirable homes to meet the housing needs of people today and in the future.

Following completion of our WHQS internal program where all heating systems were upgraded to achieve WHQS with the exception of properties off the gas grid or where tenants that had opted out. The focus of the heating program has been to maintain the systems and upgrade where the opportunity became available. During the year we carried out a further 20 fuel



## **Monmouthshire Housing Group Headquarters**

Monmouthshire Housing Group continues to operate in an energy efficient HQ building. It's a modern building and boasts many green attributes such as PV, rainwater harvesting, solar thermal, under floor heating and sensor lighting.

### **Energy usage**

Gas and electricity is closely monitored. Smart meters are in place. Any peaks or troughs are investigated. See data below under separate section - **Greenhouse gas emissions**

### **Water consumption**

Water consumption is exceptionally low as MHA have a rainwater harvest tank that serves the WCs. Consumption has remained steady during the 2018/19 period..

### **Waste**

Waste is sorted on the premises and recycled via Veolia waste service provider. Non-recyclable waste is diverted from landfill and sent for incineration at an RCF facility which has a positive impact on the environment.

### **Ecology plan**

An ecological appraisal was undertaken and remains under review We have numerous dormouse and bird nesting boxes within our grounds.. The HQ site continues to develop; we have planted flowers to attract bees, planted wild flower seeds and have implemented the recommendations highlighted in the ecology report.

### **Transport**

#### **Current Pool Car fleet**

One Pool Car (hybrid) was originally launched in May 2016 and in April 2018 we introduced an additional hybrid and two electric cars. There were two main drivers to support the business case to expand the pool car fleet:

#### **Environmental**

It further improves Monmouthshire Housing Group's green credentials as it reduces the impact on the environment.

The expansion of the pool car fleet was one of our key corporate objectives

Continuous improvement is one of the criteria that we are measured against so this will be a positive contribution.

## **Image**

It projects a professional image of Monmouthshire Housing Group as branded vehicles will be used as opposed to personal cars. It will complement our current van stock and continue to raise visibility across the estate.

## **Hybrid Cars**

We have achieved a small saving and this may improve further if the car is used more efficiently.

On average, the cars have achieved 58 miles per gallon. It's important to use ECO mode however this is sometimes turned off. The ECO drive mode button helps to reduce fuel consumption during trips that involve frequent accelerating. When engaged, the Eco mode will maximize fuel efficiency by changing the throttle input, making that input less sensitive, more smooth.

We will continue to monitor this and remind staff that ECO mode must be kept on at all times.

## **Electric Cars**

The initial capital costs associated with the installation of the electric charging points are high and the leasing costs are slightly higher than the hybrid, however, as technology improves and the number of electric models increase, it is envisaged that costs will decrease. The electricity costs are far lower than hybrid fuel consumption plus there are the environmental benefits.

Both hybrid and electric cars have proved extremely popular amongst staff. The staff work related travel consumption has decreased overall during the last financial year (18/19) compared against 17/18.

## 7. Greenhouse Gas emissions

**HQ Carbon emissions – Have been calculated using the current government conversion factor appropriate to the reporting year.**

- **Electricity consumption and associated CO<sub>2</sub>e greenhouse gas emissions**

	KWH	Defra conversion factor (Electricity)	kg CO <sub>2</sub> e
Apr17 - Mar18	147,900	0.35156 & 0.28307	48,274
Apr18 - Mar19	149,416	0.28307 & 0.2556	41,256

There has been a slight decrease in electricity consumption during 2017/18. There have been no significant changes to building operating times Equipment (where appropriate) is turned off at night and the security guard conducts building checks to ensure this is adhered to.

- **Gas use and associated CO<sub>2</sub>e greenhouse gas emissions**

	KWH	Defra conversion factor (Natural Gas)	kg CO <sub>2</sub> e
Apr17 - Mar18	14,854	0.18416 & 0.18396	2734
Apr18 - Mar19	163, 42	0.18396 & 0.18385	3006

There has been an increase in consumption during 2018/19. Winter was a particularly cold month and this is reflected in consumption. The central heating system is switched from winter to summer mode in May (Dependant on weather temperatures). Servicing is carried out twice yearly. F&C have the ability to operate the management system, this will be rolled out to all of the F&C team during 2020 to enable us to have flexibility to adjust where necessary.

### **Building Services and Capsel - Transport use and associated CO<sub>2</sub>e greenhouse gas emissions**

Monmouthshire Housing Group continue to operate an appointment system whereby trades are allocated specified days to carry out work in targeted areas. This is being closely monitored and we have seen a reduction in unnecessary call-outs, increased efficiency savings and fuel consumption reduction. CO<sub>2</sub>e greenhouse gas emissions as follows:

	Litres	Defra conversion factor (Diesel)	kg CO <sub>2</sub> e
Apr17 - Mar18 ( MHA)	109,599	2.60016 and 2.62694	285,730
Apr18 - Mar19 (MHA)	107998.02	2.62694 and 2.44620	261,857
Apr17 - Mar18 (Capsel)	12567	2.60016 and 2.62694	29,043
Apr18 - Mar19(Capsel)	12142.99	2.62694 and 2.44620	31,898

The building service van fleet have Euro 6 engines which meet all current environmental emission standards and are the cleanest.

Monmouthshire Housing Group promotes and encourages the use of environmentally friendly modes of transport during working hours including car sharing and public transport and supports the ways that reduce the need for staff to travel between sites.

## 8. Summary of Monmouthshire Housing Group's future strategy

We have made the commitment that sustainable development will be at the heart of all our business decisions. Over the coming years, we want to develop ourselves as an exemplar organisation with regards to sustainability and environmental management in Wales, especially in our management and use of carbon, waste, water and land.

Over the next five years we intend to focus on:

- Delivering further "Start Up / Slim Down" project – a Joint project between MHA and the Welsh School of Architecture (Cardiff University) in regards to the design of a Mews style house and Bungalow, which aims to meet the needs of those starting out on their housing journey and those wishing to downsize. MHA's proposal is to build both house types to a SAP of 99.6-100.2, this far exceeds a standard new build property which typically has a SAP of 79. They will be constructed from highly energy efficient materials and low carbon emissions factor boilers, supported by photovoltaic panels to provide carbon free energy for the property to use.

The properties will, wherever possible, use materials that have a low embodied carbon debt, are from sustainable sources and ideally locally sourced. The energy in use debt will be remarkably low as the SAP score is 100. This will not only reduce running costs for tenants but the dwellings will emit far less CO<sub>2</sub> than a standard new build property.

The multiple aspect approach of sustainable construction materials, low carbon emissions heating systems, building air tight but breathable homes and complementary photovoltaic panels all combine to provide a house type that will reduce carbon emissions in use and therefore go some way to meeting CO<sub>2</sub> reduction targets.

- Monmouthshire Housing Association (MHA) are undertaking an ambitious Development programme which we hope will deliver up to 700 new homes by 2022.
- Continue with various roofing and heating upgrade programmes
- Maximise new and existing technology to reduce our CO<sub>2</sub> footprint by a further 10% by 2024 to meet our corporate objective.
- A continued commitment to sustainability within the Monmouthshire community by involving tenants in the various ongoing environmental initiatives and programmes
- Maintenance of our environmental management system, Green Dragon and ISO 14001 standards
- Introduction of additional pool cars

## **Conclusion**

Monmouthshire Housing Group acknowledges the importance of reviewing performance in order to facilitate continuous improvements in environmental standards. We were re-certified to the environmental Green Dragon level 5 standard in December 2018 and ISO 14001 in March 2019. This achievement demonstrates our commitment to continuous improvement.

**Signed:**

**Name: John Keegan**

**Position: Chief Executive**

**Date: 11 June 2019**