

ABERDEEN CITY COUNCIL

COMMITTEE	Communities, Housing and Infrastructure
DATE	20 th January 2016
DIRECTOR	Pete Leonard
TITLE OF REPORT	Buildings Performance Policy
REPORT NUMBER	CHI/15/256
CHECKLIST COMPLETED	Yes

1. PURPOSE OF REPORT

The purpose of this report is to request members to approve the adoption of a new Building Performance Policy for council building projects and to instruct officers to form a Building Performance Review Group to assist and oversee implementation. The policy outlines requirements in terms of energy efficiency, sustainability and digital connectivity.

2. RECOMMENDATION(S)

It is recommended that Members:

- (a) Approve the adoption of the Building Performance Policy as detailed in Appendix 1, and;
- (b) Instruct officers to form the Building Performance Review Group (BPRG) for oversight, and;
- (c) Instruct officers to report back to committee with an update on progress of the process in 12 months.

3. FINANCIAL IMPLICATIONS

3.1 The policy would cover all new build and refurbishment projects which the council is involved with. The aim of the policy is to take a strategic view ensuring buildings are future proofed and designed to reduce the financial liability of council building stock through:-

- (a) Reducing running cost of buildings by reducing energy demand
- (b) Reducing the carbon footprint and building emissions, through preventative measurers such as BREEAM assessment and;
- (c) Future proofing buildings in terms of access to fibre broadband and building management/monitoring systems.

It is expected that any additional capital build cost would be balanced against the savings from future running costs and it would be the

responsibility of the BPRG to make a recommendation on the compliance of the development to the SIP and Capital Board.

- 3.2 As the range of buildings which this policy would apply to is very broad it is not possible to calculate the financial impact of every scenario. It will be the responsibility of the project design team, the BPRG and the SIP and Capital Board, to examine this on a project by project basis to ensure value for money.
- 3.3 The cost implications of the policy can be broken down into three key elements:-
- (a) Building Works (capital cost)
It is an objective of the policy to ensure value for money. The BPRG would be responsible for monitoring this and making a recommendation to SIP and Capital Board.
 - (b) Officer time in terms of oversight on the Building Performance Review Group.
This will be largely dependant on the scale of the project being proposed.
 - (d) Officer time as an assessor.
As the council have a range of trained BREEAM assessors where drawing on these officers is more cost effective than employing outside consultants, this approach will be taken. The “development project” would be responsible for reimbursing the relevant service for officer time.

4. OTHER IMPLICATIONS

4.1 Support for other council policies.

This policy would support a range of other council policies, projects and objectives such as:-

Sustainable Energy Action Plan – Covenant of Mayors,
Carbon Management Plan (CMP) 2011-2015,
Climate Change Adaption Plan,
Shaping Aberdeen – Strategic Infrastructure Plan (SIP)
Connecting Aberdeen – Accelerate Aberdeen
Housing Strategy – Reducing Fuel Poverty
Carbon Reduction Commitments
Climate Change Reporting Duties
Air Quality Action Plan
Aberdeen Heat Network

These are expanded under Section 6. Impact of this report.

4.2 Impact on officer time.

The policy would have an impact on officer time. BREEAM trained officers currently sit with the following teams:-

- Local Development Plan
- Development Management
- Building Standards

- Environmental Policy
- Masterplanning Design and Conservation.

Each of these teams has a full work program and any additional work on assessments and monitoring of new projects will impact on this. Depending on the level of additional work this will have to be considered on a project by project basis.

5. BACKGROUND/MAIN ISSUES

5.1 The future success of Aberdeen is built on the decisions we make today and as a public body we must demand the very highest standards of our built environment. To do this we must:-

- Lead by example and promote the quality of development we expect from the private sector,
- Produce buildings which are worthy of standing next to Aberdeen's outstanding built heritage and protect that heritage with appropriate and sympathetic refurbishments,
- Ensure all developments are efficient and adaptable to support our current and future needs and;
- Ensure that all of this is done in the context of achieving long term value for money.

5.2 Projects such as Marischal College, Marischal Square and the new Aberdeen Exhibition and Conference Centre (AECC) are examples of what we can do. These projects are designed to be highly energy efficient and rated BREEAM Excellent, however it is some of the challenges faced on these projects that have highlighted the need for this policy. The purpose of the policy is therefore to ensure that three important cornerstones are considered in all future building projects, Energy, Sustainability and Digital Connectivity, because in order to safeguard Aberdeen's successful future, our building stock must be fit for purpose and future proofed to the greatest possible extent.

5.3 *Energy*

Beyond the construction process the energy required to run a building is the most significant ongoing financial outlay. While the cost of constructing a building today can be calculated with a great deal of accuracy, the energy cost of running that building two decades in the future is much more difficult. What history does tell us is cost is likely to rise significantly over the intervening period. It is therefore important that we achieve the highest standards of energy efficiency and use systems that can isolate us, to the greatest degree possible, from volatile energy markets.

5.3.1 As one of the few cities in Scotland to have a district heating network Aberdeen is uniquely positioned to provide low cost heat across the city. Proposed future developments such as the energy from waste plant could see a significant increase in available energy, making the network a significant asset for the city. The support and growth of the network is also included in the policy; which would seek to see new

buildings connected to the network where practical or designed to connect at a future date where immediate connection is not feasible.

- 5.3.2 Just as important as ensuring the energy efficiency of the building, is management and on going monitoring of the building after completion. The policy addressed this in two ways.

The first is educating the end users.

This will be done by providing operational manuals and training to the end users for both the building and its systems. In parallel to this will be support for the users to ensure the systems are operating, and being operated efficiently.

The second aspect is monitoring and management.

Monitoring is extremely important as it is only through ongoing monitoring that we measure whether buildings achieve the energy performance they were designed to achieve. It also allows us to reduce waste though identifying over use within buildings and helping to support better practises.

For larger more complex buildings the installation of a building management system (BMS) will help to both monitor energy use and control the building. This added management capability allows the building to react automatically and more efficiently to externalities such as the weather.

5.4 *Sustainability*

The sustainability of our buildings is not just about environmental sustainability; it is also about the impact these buildings have on our lives. Do they encourage us to walk or cycle to work by providing facilities? Do they create healthy environments to work or live in? These factors are equally as important as the level of emissions a building produces or where the material for its construction came from. To ensure council developments are sustainable an assessment of the development using the BREEAM assessment methodology will be required. At present Marischal College is rated BREEAM excellent with both the new Aberdeen Exhibition and Conference Centre (AECC) and Marischal Square development are designed to BREEAM Excellent. It is the objective of the policy to ensure all new council developments deliver the same quality built environment and support other council polices, projects and objectives.

5.5 *Digital Connectivity*

In a world that is getting smaller due to greater digital connectivity the importance of access to high speed digital infrastructure has never been greater. For business to expand and grow, and to make Aberdeen an attractive place to live, the need to support fibre penetration across the city is paramount.

At a building level this will also support the Energy section above through the ability to remotely monitor energy use and control it through building management systems.

5.6 *Process*

The process for applying the policy will take the form of the policy document, to be used by the design team to shape the project and the

Building Performance Review Group (BPRG) to assist the design team and assure compliance with the policy. At appropriate points in the project procurement process the BPRG will make recommendations to the SIP and Capital Board based on their assessment of the project against the policy.

The BPRG will be formed by the following representatives.

Building Performance Review Group (BPRG)

1. BREEAM assessor
2. Energy management team
3. Asset management
4. Facilities
5. Project Management Team

Project Specific Representative (from the design team)

6. Architect
7. Representative occupant
8. Contractor / Sub-Contractors (Once Appointed)

The process for applying the policy will be expanded on in supporting guidance to be read with the policy

6. IMPACT

6.1 **Corporate** - This policy would support a range of other council policies, projects and objectives including:-

6.1.1 *Sustainable Energy Action Plan (SEAP),*

As a signatory to the Covenant of Mayors Aberdeen City council have committed to reducing carbon dioxide emissions through a SEAP. The policy would support this through a reduction in building emission and energy demand. It will also support energy projects such as the Aberdeen Heat Network and encourage appropriate Low and Zero Carbon Generating Technologies developments. By extension these will also support the targets in the *Carbon Management Plan (CMP) 2011-2015* and *Climate Change Adaption Plan*.

6.1.2 *Shaping Aberdeen – Strategic Infrastructure Plan (SIP)*

The policy would also support the SIP through helping to prevent future fuel poverty within council owned property. It will also support the plan through the *Connecting Aberdeen – Accelerate Aberdeen* program, by requiring high quality digital connectivity at home and at work.

6.1.3 Aberdeen Heat Network

The policy actively supports the heat network by requiring all new council developments to first look at the heat network as a method of heating the development. Where connection is not feasible developments would be required to make allowance for future connection.

6.1.4 *Single Outcome Priorities*

The policy would support the *Single Outcome Priorities* including:- National Outcome 1 - We live in a Scotland that is the most attractive place for doing business in Europe, 2 - We realise our full economic potential with more and better employment opportunities for our people 6 - We live longer, healthier lives, 7 - We have tackled the significant inequalities in Scottish society, 10 - We live in well-designed, sustainable places where we are able to access the amenities and services we need, 12 - We value and enjoy our built and natural environment and enhance it for future generations and 14 - We reduce the local and global environmental impact of our consumption and production

6.1.5 *Vision for Aberdeen: 2012 – 2017*

The policy would also contribute towards the Council's *vision for Aberdeen: 2012 – 2017*, particularly *Smarter Living* through working with our partners to seek to reduce the levels of inequality in the city. *Smarter Environment* 'We will increase energy efficiency' and 'We will design and construct all new infrastructure to be energy efficient by maximising the use of low carbon technology and materials'. *Smarter Economy* by investing in the city where that investment demonstrates financial sustainability based on a clear return on investment.

6.1.6 *Air Quality Action Plan*

Again the policy will support the Air Quality Action Plan through reducing emissions particularly in the city centre by encouraging connection to the heat network. It will also support low and zero carbon generating technologies and reduce the demand for energy through better building fabric and energy performance.

6.2 Improving Customer Experience – The policy would help to improve customer experience through better quality environments, lower energy bills and improved access to digital infrastructure. This would apply both within our public and office buildings, and also for tenants of council properties by providing high quality buildings with lower energy bills.

6.3 Improving Staff Experience – Similar to the customer experience the staff experience would be improved through better quality working environment. This is a cornerstone of the BREEAM assessment methodology which examines things such as air quality, access to facilities, access to natural light, thermal comfort, acoustic performance as well as supporting sustainable transport modes through walking and cycling facilities and access to public transport.

6.4 Improving our use of Resources – The primary function of this policy is to improve our use of resources. The *sustainability criteria* through the use of BREEAM, would ensure the best use is made of materials and energy, that emissions are reduced, that sustainable transport methods are supported and that the environment within the building supports health and wellbeing.

The *energy* aspect of the policy would aim to reduce both our demand for energy and ensure it is used in the most efficient way as well as seeking to source the energy through sustainable means.

Finally *digital connectivity* will not only help support our economic growth by allowing us to compete on the world stage in an economic market that runs twenty four hours but will also support the other pillars of the policy sustainability and energy efficiency.

- 6.5 **Public** – While the policy does not relate directly to the public the outcome of the policy would be as indicated above for Customer and Staff experience, with improved building environments.

7. MANAGEMENT OF RISK

- 7.1 The purpose of the policy is to limit the financial risk to the council in terms of energy demand into the future, by reducing such demand through better building practises.

It also aims to reduce CO2 and other emissions though the BREEAM assessment process. This will reward the use of sustainable alternatives to those which are CO2 polluters.

- 7.2 There may be a financial implication in terms of capital cost but these will be balanced against the running cost and the need for future retrofit in the case of digital infrastructure. This will be considered by the Building Performance Review Group when making a recommendation to the SIP and Capital Board

8. BACKGROUND PAPERS

- Appendix 1 – Buildings Performance Policy

9. REPORT AUTHOR DETAILS

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