CLIMATE CHANGE ADVISORY PANEL
3 NOVEMBER 2021
6.30 - 8.36 PM

Bracknell Forest Council

Present:
Councillors Virgo, Mrs McKenzie-Boyle, Mrs Hayes MBE, Mrs Ingham, Kennedy, Leake, Mossom, Parker and Temperton

21. **Declarations of Interest**

There were no declarations of interest.

22. **Minutes**

The minutes of the Climate Change Advisory Panel meeting held on 20 September 2021 were confirmed as a correct record.

Councillor Mrs Hayes reminded Members of the upcoming site visits and to confirm their attendance.

23. **Urgent Items of Business**

There were no urgent items of business.

24. **Chairman's Introduction**

Councillor Virgo introduced the Climate Change Advisory Panel and explained that this Advisory Panel meeting would be looking at Heat Pumps.

The Chairman made the following recommendations, which were seconded, to Councillor Mrs Hayes, the Executive Member for Environment, who would take them forward to the Executive.

1. The panel recommends that Bracknell Forest legitimise legislation in the SPD 2016 making all new development be fitted with a EV charging unit or at least electric cabling to a face plate on the exterior side of the building.

2. The panel recommends that Solar PV Panels be installed as standard on all new builds.

25. **Update on the Council's decarbonation plans**

Kevin Gibbs, Executive Director: Delivery, Hazel Hill, Energy Sustainability Officer and Laura Johnson, Executive Director (assets & growth) Silva Homes presented an update on the Council's decarbonation plans

The presentation covered the following highlights:

- The Bracknell Forest Website was kept upto date regarding the Councils Climate Change activity and could be accessed at any time.
- The Council had 4 principles to tackle climate change and would be measuring themselves against these principles.
- There were 42 projects across the council directorates.
- Big Green Week was held from19 – 26 September, which was also when the last meeting was held, the Council undertook a number of initiatives during the week.
- Property Services had been successful in a couple of Salix bids from the government.
- The greening our Waste Strategy had been successful, with the introduction of food waste which had been well used by residents.
- Recycling rates had increased above target at 58%
- Overview and Scrutiny Panel had undertaken a review to implement food waste recycling into flats across the borough which would be taken forward.
- The anti-idling project continued to move forward, and was now at the implementation stage.
- Work was also being undertaking with taxi drivers and taxi ranks.
- A number of trees were being planted as part of the Queens Jubilee celebrations
- The Bracknell Forest Giants took place in the Lexicon in August and gained national interest.
- A ground source heat pump system was being sought for Westmorland Park.
- The Panel discussed EV charging points in the last meeting, the council had secured £100k to roll out EV charging points.
- £160k of funding had been secured to look at cycling and walking plans.
- There had been15 press stories between April and August 2021.
- The food truck name video of “Dame Foodie Dench” had been very popular.
- Hazel maintained a database of 94% of houses across the borough of their energy efficiency ratings across the borough.
- The Green Deal Community project had run from 2014 – 216 and allowed residents to claim 50% of the money required to pay for energy efficiency projects.
- The Warfield Park Project 2017-18 had converted 482 park homes to mains gas saving an average of 40% of energy costs for residents. This was the largest undertaking by Cadent gas at the time.
- The Green Homes Grant Bid 1A delivered 123 retrofit measures to 99 homes and saved residents an average of £300.
- Flexible Home Improvement Loans were low interest flexible loans for homeowners over 60. Typical works include essential repairs and maintenance and new boilers.
- The Warm Home Scheme offered gas connection to homes who did not have mains gas. 28 houses had been connected across the Borough.
- Warm, Self and Well was a Public Health funded project funded over 2 years, The schemes helped those with underline health conditions and provided work such as insulation and boiler replacements.
- The Green Homes Grant bid 2 was run by the Greater South East Energy Hub and aimed to pay for “fabric first” measures.
- There was a Sustainable Warmth bid for £1.6m which had been unsuccessful.
- Lots of work had been undertaken supporting the Social Housing Decarbonising Fund with Silva Homes.
- Laura Johnson ,Silva Homes presented on the Social Housing Decarbonising Fund.

- The funding was first announced in the Conservative Manifesto in 2019, with clarification on how the funding should be used in 2020.
- £160m had been put forward for the first wave in 2021/22 and completed by 2023.
- Information regarding how the bid would be launched earlier in 2021, with guidance published on the 23 August 2021.
- The successful projects would be notified in December 2021.
- The project would start in January 2022 and completed in January 2023.
- The bases of the bid was Fabric First, Worst First, Least Regrets.
- The government were offering a mixed funding scheme, where Silva homes would put in a third and the government would put in two thirds.
- The cost caps for homes upgrades were based on the EPC performance of the home.
- The bids needed to be submitted by the local authority.
- Joint working took place to look at the requirements of the bid and the available stock data at Bracknell Forest and Silva Homes.
- External support had also been sought form the Social Housing Retrofit Accelerator.
- The bid depended on accurate EPC data.
- The bid covers 223 properties which covered a mix pf loft insulation, storage heating renewal, external wall insulation and photovoltaics.
- The total project cost was £584,175.50, the grant request was £351,650.50and Silva homes would contribute £232,525.
- The project turn around was tight, and it was important to get an appropriate contractor in place.
- The wave 2 funding was expecting to be release in Spring 2022, and this time it would not be necessary to go through the Local Authority.

As a result of the groups comments and questions, the following points were made:

- It was requested that the North of the Borough be looked at for cycling links.
- There had previously been a great plant a tree scheme – it would be great to do something similar. The Queens Jubilee would bring forward a number of new tree planting.
- Tree planting alone wouldn't combat climate issues alone in the borough.
- It was requested that coms issued around what individuals could to do change their behaviour.
- The Climate Change Officer was undertaking a regular blog regarding changes individuals could make.
- It was important that the fabric of dwellings was as airtight as possible for heat pumps. Residents were encouraged to contact Hazel who would be able to provide information on the property and even visit to give the best advice for the dwelling.
- There were no bids at present for air source heat pumps.
- The government had asked Councils to bid on funds rather than to give funding.
- The group praised all Hazel's hard work and expertise.
- Warm air heating would depend whether they were gas or electric provided and would have to be looked at on an individual basis.
- There were no new bid officers, it was built into current officer's workloads as and when required.
- Silva Homes had launched a new Strategy in July 2021 which has a focus on climate change.

- Silva Homes Climate Change Champion on the Executive Board was Rob Shaw, who was the Executive Director for People and Change.
- The data between two organisation was shared, and EPC ratings were regularly updated. If a house hadn't become vacant since 2013 then these hadn't been rated.
- The program was a national program, it was important to get a local contractor on board. It would take 3-4 months for a contractor to do loft insulations. All contractors had to be trustmarked, which not all contactors were.
- Silva Homes had an £8m programme for planned maintenance.
- £1m over next three years was being pledged as part of Silva Homes climate change strategy and £9m for the following seven years.

26. **Developers view on Heat Pumps**

Nick Rogers, Design Director for Taylor Wimpey, joined the panel to give a developers view on Heat Pumps.

The presentation covered the following highlights:

- Taylor Wimpey had an environment strategy with key targets for climate change. Key targets included reducing operational carbon emissions by 26% by 2025 and reducing carbon emissions from the supply chain and customer homes by 24% by 2030.
- In the last 8 years operational carbon emissions had already been reduced by 38%.
- There was a program to increase natural habitats by 10% on new developments.
- Taylor Wimpy aimed to cut their waste intensity by 15% by 2025 and use more upcycled materials.
- 59% emissions came from the supply chain.
- 40% emissions come from the customer's home.
- 2021 building regulations were hoped to be released in December, they were promised in 2020,it was expected that PVs would need to be put on all houses, increasing double glazing to triple glazing, install more efficient boilers with flue gas heat recovery, wastewater heat recovery systems, upgrade items around the fabric of the house.
- In four years time, it was expected the 2025 new build house would also include the air source heat pump, smart heating controls, increased wall insulation and underfloor heating instead of bigger radiators.
- It was expected that by 2025 EV charging points would be in all homes.
- Acknowledges that air source heat pumps are a large part of the solution. A lot of work would be required by 2025 to make sure it worked and it could be used successfully
- Regulations were not expected until 2023 which would give over a year to get ready.
- Work was already being done with suppliers.
- There were design issues that needed to be resolved, such as noise issues.
- Last year there had been 36000 insulation of heat pumps, the increase that the government required would affect the supply chain.
- Many suppliers required confirmation from the government before they started manufacturing.
- There was a huge issue with contractors and subcontractors in the industry at present, with people leaving the industry.

- There were only 916 trained heat pump fitters that needed to increase ten fold by 2025.
- Grid capacity was an issue.
- Insulation costs still needed to be confirmed as they varied from £4000 - £10,000.
- Customer acceptance was also a challenge.
- Ground source heat pumps were not an option as they were difficult in dense sites.
- Developers didn't want to become utility providers.
- Heat networks were difficult on low density sites.

Arising from the group's questions, the following comments were made:

- Developers were beginning to understand what the end result would be, but were still waiting for the government guidance and regulations to be released. It was difficult to change the houses that were being built at present.
- Timber looked like the obvious building solution going forward, but there were capacity issues with timber. If all house structure in Europe was turned to timber then there would be issues with supply.

27. **Heat Pump Discussion**

Russell Julier, a Consultant Petroleum Engineer, joined the meeting to give his views on Heat Pumps and the challenges faced by home heating.

Russell's presentation covered the following points:

- Russell had had a heat pump since the early part of 2021.
- Russell had started his career with British Gas.
- CO2 emissions were down by 42% since 2005, the change was how to decarbonised home heating.
- Each home was emitting over 3 tonnes of CO2.
- Most of homes in Bracknell Forest (over 80%) were heated by gas or oil which meant 1000s of homes needed to be converted.
- Home insulation was very important, it was important that our homes were well insulated, this would increase the overall demand on the national grid.
- Over half our homes needed to be upgraded to an C grading EPC.
- The options to replace boilers included air and ground sourced heat pumps, storage heaters and thermal batteries which may be useful in some settings.
- Heat pumps were the governments preferred option, but were currently expensive to install.
- The pumps used refrigerant technology to extract low grade outside heat to create higher grade heat for home heating and hot water use.
- The pros that they were very energy efficient.
- The initial cost was £7500 - £15000.
- The running costs would be higher and this was the case for Russell.
- There were additional space requirements, outside there needed to be space for the heat pump and ground loop, inside there needed to be space for a hot water tank and thermal battery.
- Radiators may need to be changed to improve heat transfer.
- Russell was estimating that he would use 12,000kwh less per year since having his heat pump installed.
- The efficiency of his heat pump was 250%.

- Electric storage heaters were another way of heating a house without a boiler, but would be more expensive to run.
- Other technologies in development included thermal batteries which were a direct replacement for boilers. These require time of use tariffs to prevent high bills.

Arising from the groups comments and questions, the following points were made:

- Having worked in the energy industry it made sense to change to an air sourced heat pump and was involved in a government scheme to get one installed fairly quickly. It also helped with the understanding and effect that it would have on a house and how to get used to the pump.
- The heat pump was not without its compromises, including the temperature of water.
- The fabric of the house didn't have to be amended.
- The noise of the fan was no louder than the old gas boiler.

28. **Date of next Meeting**

The date of the next meeting of the Advisory Panel was 11 January 2022

CHAIRMAN