

Quantifying the Skills Gap and Potential for Investment in the North East of Scotland Related to Net Zero Heating and Retrofitting Opportunities

- 1.1 Aberdeenshire Council engaged consultants to undertake analysis of the workforce and skills currently available and required in the drive to Net Zero in the North East area. These skilled workers are required for carrying out energy improvement work in buildings and installing zero emissions heating systems.
- 1.2 It was thought there would be huge potential for businesses to be set up or expand in the region to complete energy efficiency installations as well as renewable and heat pump technologies but this was not based on data. Commissioning this feasibility study, we sought to quantify the skills required in the region to ensure the Public Sector buildings can reach the 2038 target of zero direct emissions (current Scottish Government target). In addition, we wanted to understand the scale of skills required in the area to ensure our own housing stock, that of Registered Social Landlords and private homeowners could all be retrofitted, as required, in order to meet the area Net Zero target of 2045 (Scottish Government target). Progress of this nature also fits into the requirements of the Council's Route Map.
- 1.3 Heating buildings is a major source of emissions. To hit climate targets the Council needs to upgrade, or 'retrofit' these public buildings prior to addressing the carbon intensity of the heating system, known as a 'fabric first' approach. This is recommended because by addressing the building fabric first, you reduce the energy required to achieve comfort whatever the season.
- 1.4 The benefits of backing green skills are enormous. Support for green skills tackles the climate crisis, takes on fuel poverty, and provides green jobs. It can drive new opportunities for young people, marginalised groups or those in less wealthy areas including communities currently reliant on fossil-fuel for heating which is prevalent in the many off-gas grid areas within Aberdeenshire. This will help to drive a just transition, reducing inequality, as well as emissions.
- 1.5 The study identified a total labour requirement of circa 3000-5000 FTE in the North East to meet Net Zero targets. This includes a labour requirement of between 2,800 to 4,657 FTE roles in the residential sector, over the 20-year period to 2045, plus between 176 and 287 FTE roles to carry out the retrofit of the public sector building estate in the region to 2038.
- 1.6 Points to note are that this assessment is the total volume of jobs to deliver the pipeline, some of these will be in the current workforce but require some upskilling to work to new standards such as plumbers and electricians to move from gas systems to alternatives such as heat pumps and PV systems. Nevertheless, some skills do not exist such as Retrofit Co-ordinator to comply with PAS 2035 domestic retrofit standards. The analysis highlights a requirement for between 450 and 760 Retrofit Co-ordinators in the residential retrofit segment and a further 17-29 in the public sector.

Appendix 2 - Quantifying the skills gap and potential for investment in the North East of Scotland related to Net Zero heating and retrofitting opportunities study summary

- 1.7 The numbers noted are totals and have a wide tolerance due to unknowns such as speed of deployment of retrofitting and heating changes for the area. It is anticipated that public buildings and Registered Social Landlords will lead the way due to earlier target requirements. Perhaps this will give confidence to the market to upskill and retrain employees or expand the workforce.
- 1.8 The study showed there is a requirement for a deeper knowledge and understanding of air tightness, ventilation, and thermal bridging in order to achieve the required efficiency gains from retrofitting homes and public buildings. There are already significant shortages in the number of Retrofit Insulators available, according to the industry.
- 1.9 Next steps recommended are to consider a full gap analysis with assessment of specific segments of accredited and non-accredited workforce in the region to analyse the size of the capacity and capability gap and economic opportunity. Part of this would be to identify how much of the workforce are already working in the retrofit arena, so shortages in skills can be defined more accurately. It is also recommended that there is engagement with education partners to highlight training opportunities and encourage development of the right courses to play a role in upskilling the workforce.