Does Scotland have the right policies (Clean Air for Scotland Strategy), support and incentives in place to adequately tackle air pollution?

In relation to strategies towards woodburning appliances, air quality improvement measures can be significantly increased by ensuring fuels on both woodburning and solid mineral fuel appliances are burnt under the most clean and efficient combustion conditions to limit the number of particles emitted into atmosphere during the combustion process. Burning high quality fuels in a highly efficient and low emitting appliance will characteristically increase clean and efficient combustion conditions occurring, whilst at the same time providing more heat into the room, increasing consumer comfort and lowering energy bills.

Wet wood fuel is very inefficient as it demands a lot of initial heat to boil off the water contained within the fuel before the appliance can give out the proper level of heat to the room or system. The water turning to steam during combustion then mixes with the exhaust gases causing unburned emission particles and gases forming and being exhausted up the chimney, resulting in higher smoke emissions.

Consumers are still in position to purchase inefficient, wet wood from retailers, in particular from garage forecourts, DIY shops and garden centres, and in most cases are unaware that some of this wood purchased, dependent if it is kiln dried, requires “seasoning” before being burned on the appliance. Consumers unaware of the small print simply continue to burn it in its unseasoned state immediately after purchase.

An increased message in raising awareness to the consumer on both the importance and knowing how and where to buy the right wood fuel, as well as promoting the effort to buying dry fuels, will ultimately result in the improvement in air quality emissions from solid fuel burning appliances. This is something both HETAS and Woodsure continue to achieve in support of reducing air quality, through advice leaflets and knowledge given to them by the installer of the appliance.

Burning quality fuel on an efficient appliance enables clean combustion conditions to occur. 2022 Ecodesign regulatory requirements outlay more stringent emission and efficiency requirements for woodburning stoves. Current appliance test standards regulate the maximum emission of Carbon Monoxide, as well as CAA regulating PM emission in SCA. Ecodesign appliances will increase regulatory levels further by setting maximum limits for NOx & OGC emissions as well as more stringent PM and CO requirements. Ensuring the consumer is able to make an informed choice in selection of highly efficient and low emitting appliances will improve these measurements further, being achieved by promotion of Ecodesign Ready appliances as well as burning quality wood fuels.

Woodsure have worked closely with DEFRA to launch the “Ready to Burn” fuel quality scheme, informing consumers about the importance of using clean, dry wood fuel to improve air quality. All fuels on the scheme are appropriately audited as to ensure moisture contents remain below 20% and ensures the control of raw materials at the point of sale, or delivery to the end user including firewood in small retail bags and bulk delivery. Fuels which meet the requirements of the scheme will
be marked up with the “Ready to Burn” logo for easier understanding by the consumer on suitable fuels to burn in their appliance.

Along with fuel quality, HETAS currently run an “approved appliance” scheme to ensure compliance with energy efficient measures detailed in the UK building regulations. In preparation for the new Ecodesign regulation, HETAS currently administer the register of Ecodesign Ready stoves and produce a list of suitable ready stoves for consumers to choose appropriately, years before the initial regulation is enforced in the official journal. Any consultation should consider replacement of old “open fired” appliances, whose efficiencies and emissions have been proven to significantly increased against operation of new closed EcoDesign appliances.

The HETAS appliance approval scheme has seen a significant shift over the last 10 years on the number of appliance types within the guide. In 2007 over 16% of listed products in the HETAS guide were open fired roomheater appliances. Compared to today, only 0.1% of appliances approved in the HETAS guide are open fired roomheater appliances. The industry has shifted considerably in the promotion of more efficient closed roomheater appliances. All appliances on the register are audited to ensure performance and installation guidance are in full compliance with the Building Regulation Requirements.

**Are the policies sufficiently ambitious?**

Ultimately the buy in for these strategies will need to come from the user/purchaser of solid fuel heating appliance, and increasing user knowledge on how to operate the appliance effectively and the correct fuels to burn. More regulatory control on the types and moisture contents being burned, as well as an increase in consumer awareness on the effects of quality fuel on emissions would go a long way as to improving air quality strategies.

Incentive schemes for appliances to help encourage new, more efficient appliances being installed and operated would boost air quality measures, such as scrappage scheme, tax reduction or voucher strategies like previous boiler scrappage schemes could be beneficial. Possibilities to interlink this and support the new energy labelling legislation for solid fuel woodburning appliances coming into force in January 2018, with those roomheater appliances receiving energy efficient index ratings lower down the label rating scale being considered.