

# **Sustainable Energy Association**

Next Steps for Boiler Plus

January 2019



## About the Sustainable Energy Association

In a world of finite resources, the Sustainable Energy Association exists to help create living and working spaces fit for future generations. Our work seeks to align the interests of business, politicians and consumers to make this a reality.

We are industry leaders in energy in buildings. We are technology agnostic and provide objective, evidence-based policy positions which help shape how we think about, generate and use energy. We are constructive, collaborative and committed to achieving our vision, by ensuring that buildings are energy efficient, low carbon and warm.

The Sustainable Energy Association (SEA) is a member-based industry body. We draw on our wideranging membership from manufacturers of energy saving technologies and heating systems to housing associations with an interest in sustainable energy. SEA member's manufacture, distribute, install, retail or regulate a range of technologies, they also own and manage homes and supply energy. We take an objective 'whole building, technology agnostic approach' that recognises that there is no single solution to the energy challenges faced by the UK.



The Sustainable Energy Association has long advocated a pathway of gradual improvements to domestic heating systems to improve standards of UK heating. The SEA has published two papers on the subject one in 2015 and one in 2016 in which we set out our recommendations.

For more information or to discuss the proposals outlined in this policy paper, please contact <u>Lesley.Rudd@sustainableenergyassociation.com</u>.



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### 1. Introduction

The new standards introduced in the <u>Boiler Plus policy document</u> in April 2018 were welcomed by the SEA as an excellent first step on that pathway. This paper provides insight from SEA members as to how the regulations are being implemented and looks at how progress can be built upon and the next steps needed in the pathway.



#### 2. Summary and Recommendations

The below recommendations are consistent with the Clean Growth Strategy and are no-regret, technology-agnostic options. They do not require us to wait for longer term decisions on the heat decarbonisation pathways or other policies before action to improve our homes and our environment can be taken.

- Decarbonising our heating systems is key to achieving our carbon targets and protecting the environment for future generations. The Clean Growth Strategy set out an objective of delivering changes that will stimulate economic growth while reducing carbon emissions. Consumers, and their homes, are at the heart of the strategy. Achieving the strategy will involve the phase out of high carbon fossil fuel heating and a move to lower carbon and renewable heating systems.
- Through the new Boiler Plus standards introduced in April 2018, the Government aimed to drive the market for higher performing boilers and measures which facilitate their efficient operation. A one-year review of the policy provides the opportunity to both assess its implementation and to set out further steps to improve and decarbonise our heating.
- It is important that progress continues, that Government builds upon the hard work and success of Boiler Plus and takes forward this opportunity. After ten years without regulatory progress, Boiler Plus was a milestone and a much-needed success, but the review should not be a mere 'health-check'; we cannot wait 5 years to make further improvements. The review needs to serve as a signal that the Government is ready to review all aspects of the scheme and implement improvements.
- The SEA calls on the Government to ensure that the Boiler Plus policy is not a one-off change in 2018 but is part of a long-term pathway that delivers credible, staged improvements to efficiency standards in the building regulations and sets out a clear direction for the industry and its supply chain. These improvements should include:
  - Explicit mandating of hydraulic balancing
  - Introducing low flow temperature requirements
  - Extending the policy to cover heat only/system boilers
  - Extending the policy to cover oil boilers

Action can and should be taken now to deliver more efficient domestic heating, reduced energy bills and lower carbon emissions. The alternative is to stand by and watch as the problem worsens.



#### 3. Boiler Plus background

The action to set higher standards for boiler performance efficiency under factory test conditions was very successful in 2005 and was the driver for the mass roll out of condensing boilers. However, many years later technology had progressed, but standards had remained the same. In addition, it was unclear as to whether there was a legal requirement for heating systems to be modified and balanced as appropriate to ensure boilers perform as they do under factory test when in situ. This meant that there was a lost opportunity as customers investing in new heating systems were unable to achieve expected fuel bill and carbon savings. To install a new heating system and then not optimise its operation is wasteful in terms of both energy and carbon and the consumer is unlikely to be aware that the operation of the new system is not optimised.

The SEA therefore supported and welcomed the introduction of improved standards under "Boiler Plus".

#### **Boiler Plus Requirements**

The new standards outlined in the <u>Boiler Plus policy document</u> set a new minimum performance standard for domestic gas boilers in English homes at 92% ErP. The standard also made timers and room thermostats an explicit requirement for all gas and oil systems. When a gas combination boiler is installed, an additional energy efficiency measure is now required. This requirement is flexible to allow a suitable choice to be made that reflects the diverse nature of the housing stock, and the needs of the household. The energy saving technologies that can be used to comply are:

- Flue gas heat recovery systems
- Weather compensation
- Load compensation
- Smart controls featuring automation and optimisation functions.

These changes were introduced as a requirement from 6<sup>th</sup> April 2018 and have been implemented in the <u>Domestic Building Services Compliance Guide 2018</u>.

The successes of Boiler Plus provide evidence in support of Government intervention to raise the standard of heating in homes whilst cutting carbon emissions. For this reason, SEA members are supportive of Boiler Plus and would like to see the initiative behind it extended to all heating systems, including oil, heat only and system boilers. This should ensure that the standard of heating systems within homes is the best it can be regardless of the system type.



#### 4. How is it being implemented?

SEA members report that Boiler Plus has generally been well received by industry and they are supportive of the policy. Implementation generally takes place through manufacturers, trade associations, specifiers and installers, with negligible communication from Government. Manufacturers endorse the requirements of Boiler Plus through technical training, installer engagement at events and exhibitions and general marketing to consumers. Some manufacturers have also produced public relations articles and information on Boiler Plus for the trade press. It is important to highlight the key role manufacturers play in promoting Boiler Plus to installer and consumer groups.

Even though there are efforts made to promote Boiler Plus there is a general consensus amongst SEA members that consumers are unaware of its requirements. It is suggested that consumers are unaware of the impact of the introduction of Boiler Plus on installations.



#### 4.1. Measures installed

As a result of Boiler Plus, consumer offerings are being developed in support of the policy. Some manufacturers are offering weather compensation as standard with every boiler at no extra cost to the consumer, others are offering them at low additional cost (less than £25). SEA members have seen large increases in the sales of load and weather compensating controls and are developing new lower cost product solutions to meet the demand for them. There has also been a substantial amount of market activity related to smart controls with offerings increasing in this area. The sales of smart controls are high according to some SEA member statistics. This is likely to relate to the implementation of Boiler Plus and a general upward trend in demand for connected solutions. Both increases in weather and load compensation and smart controls are positive developments for consumers.

There is evidence from SEA members that Boiler Plus has had a significant effect on the type of timer controls sold in the last year. Non-Boiler Plus compliant timer controls (basic and digital) have seen a decline in sales whilst those which adhere to Boiler Plus standards are significantly higher, for both wired and wireless versions.

Similarly, sales of Boiler Plus compliant temperature controls (which can be added to basic timer controls above to make a system compliant) have increased significantly since the policy's implementation, from a low market penetration prior to the policy.

We note that Boiler Plus can require some additional effort from installers, which means that most installers opt for lower cost, Boiler Plus compliant control solutions. These cost-effective measures appear to be the most popular when it comes to energy saving technologies.



However, it is apparent that some installers appear to stick with familiar, cheap technology even if there is an increased workload involved as additional controls are also needed. These cheaper, simple controls have become slightly less popular after the introduction of Boiler Plus. A preference for the installation of the least costly measures may be holding back the implementation of more sophisticated and more costly measures which would have a greater impact on energy bills and carbon emissions. For example, technologies such as flue gas heat recovery devices are not being installed during a boiler replacement in large numbers. SEA members highlight that for this technology in particular, cost is likely to be a deterring factor as well as installation limitations such as lack of height and space.

#### 4.2. Marketing and awareness

SEA members are supportive of the Boiler Plus initiative and are taking opportunities to promote it to installer and other customer groups. They endorse the requirements of Boiler Plus through technical training, installer engagement at events and exhibitions and marketing to various customer groups, and articles on the subject to trade press

SEA members report that consumer awareness of Boiler Plus is low, but it is recognised that provided the policy is implemented and advertised correctly this will not detract from the benefits it provides for the consumer or the environment. However, increased consumer awareness and understanding would help improve the application of the policy and could encourage further innovation by industry. It is important to note that whilst awareness amongst consumers may not be high, the policy itself has highlighted that heating systems often do not operate as effectively as they should and has encouraged discussions around best practice including how to ensure hydraulic balancing is carried out.

One area where there has been some confusion which may result in consumers being misled is with regard to what is meant by 'Boiler Plus Compliant'. Some consumer offerings claim that they are 'Boiler Plus Compliant' but they do not offer an additional measure, despite this being required to do so under the policy. Some of the supporting literature/advertisements do state that an additional measure is required but this is often in smaller print and much less noticeable than the 'Boiler Plus Compliant' headline.



#### 4.3. Compliance

The requirements of Boiler Plus are mandatory however following its introduction it was widely reported on social media that a large installation company had been offering customers the option of opting out of the standards. See reported text below.

#### **Boiler Plus Policy**

We have explained the Boiler plus requirements as well as the benefits of having one of the qualifying measures installed. You have requested not to accept a qualifying measure. At some future point your local authority (if appropriate) or a Gas Safe inspector may require this to be installed.

This led to the '<u>Clarification on the Boiler Plus regulations for installers and consumers'</u> notice being published by BEIS on 31<sup>st</sup> July 2018.

The notice makes it clear that the standards for boiler installations are mandatory and must be met by every installer and that there is **no provision** for anyone to opt out of these standards. It stresses that an installer must not carry out an installation that does not meet the standards, even if the customer requests an opt out. Responsibility for compliance sits with the person carrying out the work, and non-compliant installations can lead to action being taken against the installer. An installer is **not** excused from their obligations by making their customer aware that the work is non-compliant.

SEA members were reassured by the Government's timely and efficient response to this case. It is encouraging to see industry helping to police the policy and a strong response from Government when issues are highlighted.

Members hope that future breaches of Boiler Plus policy such as the misleading of customers by advertising systems as being 'Boiler Plus compliant', as described above, can also be swiftly dealt with.



#### 5. Review of Boiler Plus

The Government has committed to a review of Boiler Plus one year after its implementation and subsequently 5 years after its implementation<sup>1</sup>. This one-year review provides the opportunity to review progress in implementation of the new standards. Importantly it also allows us to assess what further improvements can be made to move the UK further along the pathway towards more efficient domestic heating, reducing consumer's energy bills and carbon emissions and leaving a legacy of more efficiently heated homes. SEA members believe the one year review should highlight the successes of the policy and, make proposals and recommendations for its improvement. The one year review should not just be a "health check".

This review is an important milestone as it provides an opportunity for Government to set out the next steps along the pathway. A staged approach will provide a stable regulation timetable, which maps out the strengthening of efficiency requirements for residential boilers as technology improves and supports the deployment of future-proofed heating infrastructure making homes "renewables ready". The clear setting of a pathway to improve heating system efficiency allows industry and installers to prepare and innovate for forthcoming changes to regulation.

Given the significance and urgent need to address climate change and fuel poverty, it is clear that any policy that can act to reduce the impact of these, should do so to the greatest extent possible. The concept of policy additionality dictates that; any government intervention should seek to have the greatest positive impact on the targeted public and mitigate any unwanted negative impacts. In this sense, the Boiler Plus policy should seek to improve system efficiency and lower fuel bills and carbon emissions as much as possible.

#### 6. Next Steps on the Pathway

In 2016, the SEA published its 'Heating System Plus Position Paper'<sup>2</sup>. It identified four stages in the policy pathway and made it clear that further incremental steps would be required.

Stage 1 in the pathway was making good boilers work optimally. It required regulation to ensure that every boiler is rated at 92% ErP, has mandated controls and/or add-ons and is hydraulically balanced to ensure that the boiler performs optimally. There are boilers on the



<sup>&</sup>lt;sup>1</sup> BEIS Boiler Plus Consultation Response (2018) p. 13

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/651853/ Boiler\_Plus\_final\_policy\_and\_consultation\_response.pdf <sup>2</sup> https://www.sustainableenergyassmociation.com/wp-content/uploads/2017/03/SEA-Heating-System-Plus-

<sup>&</sup>lt;sup>2</sup> <u>https://www.sustainableenergyassmociation.com/wp-content/uploads/2017/03/SEA-Heating-System-Plus-</u> <u>Report.pdf</u>



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market that currently achieve higher efficiencies than the minimum efficiency required by Boiler Plus and therefore we stress the need for this policy to kept under review and standards increased as boiler efficiencies improve further.

There are a number of additional stages to our proposed pathway that can be implemented today. The opportunity to increase the positive impact of the initial policy must not be lost. There is a need to continue along the pathway of regulatory change, mapping out the strengthening of efficiency requirements for residential boilers as technology improves and evidence increases, and to support the deployment of future-proofed heating infrastructure.

## 6.1. Hydraulic Balancing

Most of Stage 1 has effectively been delivered by the introduction of Boiler Plus and this is welcomed. However, the SEA included in our recommendation for Stage 1, a requirement that all systems be hydraulically balanced and the extent to which this is being implemented is not clear.

The Boiler Plus consultation response stated that "hydraulic balancing is an expected practice" and that "consumers should expect their installer to undertake this, and not to charge excessive fees for it". It recognised that "many installers are not familiar with this practice and many more are overcharging consumers". It also noted that installers should take appropriate action to address this skills gap" and Government "may look to enforce hydraulic balancing in future," but it stopped short of explicitly doing so now.<sup>3</sup>

The planned one-year Review of Boiler Plus provides an excellent opportunity to highlight the importance of hydraulic balancing. The Review of the Building Regulations in 2019 also presents an opportunity to be more explicit about the requirement to carry out hydraulic balancing Although hydraulic balancing should be done, consensus in the industry shows that it is rarely carried out and this reduces the overall effectiveness of a Boiler Plus compliant system. Some manufacturers now offer information to reinforce the implementation of hydraulic balancing on the appropriate product training courses, and this could be rolled out on a wider scale to increase uptake and therefore raise standards.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/651853/ Boiler Plus final policy and consultation response.pdf



### 6.2. Renewable technologies

There are <u>Microgeneration Installation Standards</u> which set out requirements for installers undertaking the supply, design and installation of renewable technologies. These requirements need to be met for the installation to be eligible for Renewable Heat Incentive (RHI) payments. The requirements are many and strict; one of which requires systems to be properly balanced. These requirements on renewable heat installations such as heat pumps are not currently replicated in non-renewable installations such as gas boilers. This adds to the already numerous barriers constraining the uptake of renewable options and the lack of a level playing field. They also add to the barriers for installers transitioning from fossil fuel to renewable installations, particularly if awareness and familiarity of hydraulic balancing is limited.

The Government should therefore set out clear and fair policy for the installation of all types of heating systems to ensure that standards are high but costs of adhering to those standards are not disproportionally higher for renewable technologies.

The SEA is clear that there is no silver bullet for decarbonising heat and so a range of technologies will be needed. Against a policy background of the Clean Growth Strategy and an ambition to decarbonise the heating of our buildings, the setting of higher standards for renewable technologies than fossil fuel ones is inconsistent at best. We need to ensure that all heating systems, not just renewable ones, are required to be installed to operate optimally. SEA members propose that Boiler Plus should be transformed into a Heating System Plus, encompassing all forms of heat generation and not just boilers.

#### 6.3. Lower temperature systems

The Clean Growth Strategy committed to ensuring that the building regulations encourage futureproofing new homes for low carbon heat. The Committee on Climate Change also stressed that "in order to avoid costly retrofit in the future, buildings must be designed to accommodate low carbon heating options from the start, deliver high levels of energy efficiency, and be resilient to a changing climate."<sup>4</sup> Ensuring that both existing and new homes operate at low flow temperatures is essential to ensuring that homes are able to accommodate low carbon heating options and operate efficiently.

There are over 27 million households across the UK, a large proportion of which date back to the Victorian era<sup>5</sup>. Despite Building Regulations being introduced in 1965, many of these properties are still considered thermally inefficient. Approximately 80% of the homes we live in today will still be in use by 2050<sup>6</sup>. This demonstrates the size of the retrofit market in comparison to the new build market and the longevity of these buildings. However, the new build market provides an opportunity to implement efficient lower temperature heating systems from the outset since the

 <sup>&</sup>lt;sup>4</sup> <u>https://www.theccc.org.uk/wp-content/uploads/2018/06/CCC-2018-Progress-Report-to-Parliament.pdf</u>
<sup>5</sup> DECC, 2013. <u>The Future of Heating: Meeting the challenge</u>

<sup>&</sup>lt;sup>6</sup> Construction Industry Council (2013) <u>APPG for EBE – Inquiry into Sustainable Construction and the Green</u> <u>Deal</u>



consumer will feel no or very limited disruption and inconvenience. Moreover, this would support the development of the supply chain making it better placed for the changes to retrofit standards and introduction of lower temperature heating systems as standard.

By ensuring that heating systems operate at a low temperature, consumers will benefit from fuel bill savings and a more efficient heating system. For example, operating at lower temperatures will help to ensure that a gas boiler actually condenses and runs efficiently thus not wasting energy.

In the SEA's 'Heating System Plus Position Paper'<sup>7</sup>, it was recommended that the next stage of the Boiler Plus Policy Pathway should facilitate a move towards lower temperature heating systems by requiring return temperatures be less that 55°C rather than "*preferable*" as currently stated in the Domestic Building Services Compliance Guide (DBSCG)<sup>8</sup>.

This could be achieved by ensuring that radiators are appropriately sized, for example designed down to 70°C/55°C. This would not only result in all radiator systems being more efficient, particularly those with condensing boilers, it would also ensure that homes have heating systems which are future proofed for low carbon technologies such as heat pumps.



We would additionally recommend that the guidelines state that it is 'preferable for return temperatures to be 45°C' to encourage installers to go above the minimum standard and ensure that homes are future proofed for low carbon heat. This will involve mandating the assessment of radiators/heat emitters to ensure optimum sizing and water temperature. If necessary, the radiators/heat emitters should be changed to facilitate a lower return temperature. It is important to note that as the thermal efficiency of a building is improved, radiators may become 'oversized' by default thus making a low temperature heating system easier to achieve with minimum cost to end-users.

We recommend that at the 5-year review, heating systems are required to operate at a lower temperature e.g. radiators designed for 55°C/40°C to allow consumers to benefit from more efficient low temperature heating systems.

The SEA's recommendation of lower flow temperatures is supported by the Committee on Climate

<sup>&</sup>lt;sup>7</sup> <u>https://www.sustainableenergyassociation.com/wp-content/uploads/2017/03/SEA-Heating-System-Plus-Report.pdf</u>

<sup>&</sup>lt;sup>8</sup><u>https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/453968/domestic\_building\_services\_compliance\_guide.pdf</u>



Change which stated in its 2018 Report to Parliament "The natural replacement of older boilers can be expected to continue to deliver reductions in emissions. However, there is a range of wider factors which determine efficiency, such as system flow temperature ('return' temperatures should be no higher than 55°C for condensing boilers to work efficiently) and the degree to which systems are hydraulically balanced".<sup>9</sup> They state that savings can be derived by reconfiguring heating systems in this way.

### 6.4. Extending Requirements

#### 6.4.1.Heat only/System Boilers

The requirement for additional efficiency measures to be installed as part of the Boiler Plus policy only applies to combination boilers, it does not extend to heat only and system boilers. SEA members are very keen to ensure that heat only and system boilers are included in future iterations of Boiler Plus, for enhanced efficiency and controls or add on measures however it is recognised that flue gas heat recovery is not an option for these systems.

Combination boilers heat the water on demand straight from the mains supply and therefore negate the need for tanks to hold hot water whereas system boilers use water tanks to store hot and cold water and usually produce hot water twice a day. Combination boilers satisfy the needs of many homes, usually where there is limited demand for hot water for example where occupancy is low or there is one bathroom. However, system boilers are more appropriate for larger homes with higher demand for hot water at the same time, perhaps due to higher occupancy and/or multiple bathrooms. These homes usually require a vented or unvented hot water cylinder supplied through system and heat only boilers.

Whilst combination boilers are very popular particularly in smaller properties, it is estimated that there are 354,000<sup>10</sup> heat only/system boiler replacements per year in England. SEA members have highlighted that there may be a relationship between the implementation of Boiler Plus and increased sales of heat only boilers, which are not covered by the policy. For some members this growth compared to combi boilers is also seen for system boilers, which implies that some installers may be avoiding the Boiler Plus requirements by installing alternative systems. Although the evidence is inconclusive for a definite relationship between Boiler Plus and increased sales of heat only/system boilers to be determined, extending the Boiler Plus requirements to this sector of the market could in any case provide up to 4 million homes with the benefits of more efficient systems and improved system controls.

It is recommended that the Boiler Plus policy is extended to include heat only/system boilers. If the one-year review does not take the opportunity to extend the policy in this way, there could be around £1.8bn of lost energy bill savings and up to 7.42MtCO<sub>2</sub>e of lost carbon abatement by 2034<sup>4</sup> (based on weather compensation savings alone).

<sup>&</sup>lt;sup>9</sup> <u>https://www.theccc.org.uk/wp-content/uploads/2018/06/CCC-2018-Progress-Report-to-Parliament.pdf</u>



#### 6.4.2.Oil Boilers

The installation of oil boilers is not consistent with delivery of the Clean Growth Strategy and the Government's pledge to phase out high carbon fossil fuels or with the UK achieving its carbon targets. The installation and repair of oil boilers should therefore be actively discouraged by Government policy. However, where they are operating every effort should be made to ensure they do so as effectively as possible in order to limit their impact on the environment.

Oil boilers typically have a long lifetime and once the infrastructure, including oil tanks, is installed, consumers can be locked into the technology for many years and the consequences for the environment will also last many years. It is important therefore that the requirements of Boiler Plus are extended to include oil boilers.

Oil boilers were not included in the initial Policy Plus policy and therefore are not required to install an additional energy efficiency measure. This was due to the Clean Growth Strategy outlining clearly the "ambition is to phase out the installation of high carbon fossil fuel heating in new and existing business buildings off the gas grid during the 2020s"<sup>11</sup> and it did not therefore seem necessary. Whilst the SEA would have preferred oil boilers to have been required to meet the same standards as other heating systems, we understood this rationale given that the Government was due to introduce policy to phase out oil boilers. However subsequent policy announcements, such as those regarding the Energy Company Obligation, have meant that oil boilers will continue to be installed into the 2020s. If oil boilers are to continue to be installed, then the Boiler Plus policy should be extended to cover them. Whilst we recognise that oil boilers will not be able to achieve the 92% ErP efficiency, new oil boilers should be fitted with one of the four additional energy efficiency measures and must be operated as efficiently as possible, including running at lower temperatures and being hydraulically balanced.

The one-year review provides an opportunity for BEIS to show its commitment to a transition from high carbon fossil fuels and to provide a staged approach to phasing out oil boilers. This means setting a clear end date and using the Boiler Plus policy as a way to improve oil boilers installed today ahead of the phase out and prepare homes for the installation of low carbon heating solutions in the future.

<sup>&</sup>lt;sup>11</sup> <u>https://www.gov.uk/government/publications/clean-growth-strategy</u>



#### 7. The need for action

The Department of Energy and Climate Change's (DECC) departmental plan for 2015 to 2020 cites 'keeping household bills low' as one of the four core objectives of energy policy. Indeed, high energy bills seen in the UK have had an adverse impact on householders struggling to power and heat their homes. With high bills comes a higher threat of fuel poverty, and with it a greater exposure to ill health as a result of poorly heated properties. Age UK estimate that illnesses caused by cold homes costs the NHS in excess of £1.36 billion a year in hospital and primary care<sup>12</sup>.

Fuel poverty can be tackled by helping households lower their energy bills. The installation of measures that enable heating systems to operate efficiently, creates a significant opportunity to reduce the amount of energy needed to heat homes. The lower the consumption, the lower the fuel bill, which provides substantial benefits to UK householders.

Lower residential heating demand also benefits the UK through reduced energy imports and thus greater security. Currently the UK imports nearly half of the total energy consumed<sup>13</sup>. Ensuring that our heating systems are operating efficiently lowers the country's exposure to and demand for foreign imports that could vary in price and availability in the future and be subject to currency risk. This reduction in risk is valuable in itself.

In addition to affordability and security benefits, the UK is legally bound to achieve its 2050 target of reducing carbon emissions by at least 80% - compared to 1990 levels. Building emissions, primarily those from heating, accounted for 18% of all emissions produced by the UK in 2015. The independent Committee on Climate Change (CCC) is mandated to set a number of stepping-stone carbon budgets to help the UK reach its target cost-effectively. Policy makers have recognised the need to eliminate virtually all heat related emissions from buildings if the UK is to meet its legally binding targets in 2050. How we heat our buildings is key to achieving those carbon targets and to protecting our environment

In its 2018 Progress Report to Parliament the CCC reported that in 2018, "emissions in the industry, buildings and waste sectors have increased; and emissions in transport and agriculture are flat. Only power and F-gas emissions have fallen. This is now an acute concern - progress in the last five years has effectively stalled."<sup>15</sup> The CCC noted that the market alone is unlikely to deliver a solution. It recommends regulation but highlights that they "must also be enforced to be effective" and "the consumer is cheated when higher energy bills are locked-in for generations when stated building standards are not enforced." It is therefore essential that a regulatory pathway is implemented and widely enforced to enable consumers across the UK to benefit from improved standards.

<sup>&</sup>lt;sup>12</sup> Age UK (2012) <u>The Cost of Cold: Why we need to protect the health of older people in winter</u>.

<sup>&</sup>lt;sup>13</sup> Net imports at 45% and UK production at 55%. Source: DECC (2015) <u>https://www.gov.uk/</u>

<sup>&</sup>lt;sup>14</sup> Committee on Climate Change (2016) Progress Report

<sup>&</sup>lt;sup>15</sup> <u>https://www.theccc.org.uk/publication/reducing-uk-emissions-2018-progress-report-to-parliament/</u>



Sustainable Energy Association Next Steps for Boiler Plus

#### 8. Conclusion

In its Clean Growth Strategy, the Government outlined its intention to consult on strengthening energy performance standards for new and existing homes under Building Regulations, including futureproofing new homes for low carbon heating systems. The Boiler Plus Policy is a first step on a pathway to improve our heating systems and make them "low carbon technology ready". Key to this is to use the disruption afforded by the need to install a new boiler to make other changes to the heating system to ensure the high efficiency capabilities of modern boiler technology is fully exploited. A progressive, pathway approach to improve heating system efficiency through a series of staged improvements in standards and installation practices will ultimately pave the pathway for future low carbon heating systems. Heating systems in buildings will only be installed around once every 10-15 years so the opportunity to make the system as efficient as possible must be taken otherwise the opportunity will normally be lost for at least ten years.

It is important that progress continues, that Government builds upon the hard work and success of Boiler Plus and takes forward this opportunity. After more than ten years without regulatory progress, Boiler Plus was a milestone and a much-needed success, however Government should not rest on its laurels. The review should not be a mere 'health-check'; we cannot wait five years to make the necessary changes required. The review needs to serve as a signal that the government is ready to review all aspects of the scheme and implement improvements.

This upgrading of domestic heating in the UK is essential if the UK is to meet its carbon targets. The policies recommended in this document are no-regret options which do not need to wait for long term decisions about future strategy. They are entirely consistent with the Clean Growth Strategy and the commitments within it. Boiler Plus one-year review is an excellent opportunity to continue on a path to improved heating system efficiencies, lower bills and lower emissions.

Many technologies with improved system efficiencies already exist and others are being developed however, the deployment gap needs to be bridged. The industry needs a clear signal of policy direction over the next 10 to 15 years to provide stability and enable adequate planning and investment.

The decision by BEIS to reverse the Energy Company Obligation consultation proposal to remove support for oil boilers despite the majority of responses to the consultation supporting it, has damaged confidence in the Clean Growth Strategy.

The SEA therefore calls on the Government to ensure that the Boiler Plus policy does not consist of a one-off change in 2018 but is part of a long-term pathway that covers all heating systems and delivers credible, staged improvements to efficiency standards included in building regulations and sets out clear direction for the industry and its supply chain.

The Boiler Plus one-year review is an opportunity to reassure industry and its investors that the Clean Growth Strategy remains the ambition, that heat decarbonisation remains part of that commitment, and that Government will continue along its stated pathway.



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