#### Title:

Streamlining Smoke Control Orders for exempt fireplaces and authorised fuels in England

IA No: DEFRA1226

#### Lead department or agency:

Department for Environment, Food and Rural Affairs

Other departments or agencies:

## Impact Assessment (IA)

**Date:** 10/02/2015

Stage: Final

Source of intervention: Domestic

Type of measure: Primary legislation

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**RPC Opinion: Validated** 

### **Summary: Intervention and Options**

Cost of Preferred (or more likely) Option						
Total Net Present Value	Business Net Present Value	In scope of One-In, Two-Out?	Measure qualifies as			
£610,423	£0	£0	Yes	Zero Net Cost		

#### What is the problem under consideration? Why is government intervention necessary?

The Clean Air Act safeguards air quality by prohibiting smoke emissions in Smoke Control Areas unless using an authorised fuel or exempt appliance. Currently an exemption is applied following an assessment by Defra's technical advisors and subsequently listed in 6 monthly smoke control statutory instruments which creates delays in the approvals process and burdens for industry and government. Therefore, as part of Government's Red Tape Challenge, a commitment was made to simplify the current process for authorising fuels and exempting fireplaces for use in Smoke Control Areas in England as designated by the Clean Air Act.

#### What are the policy objectives and the intended effects?

To amend the Clean Air Act via the new Deregulation Bill to grant the Secretary of State powers to authorise the use of fuels and fireplaces in England administratively by the publication of a list on Defra's smoke control web pages. No changes are to be made to the exemption process and the same technical standards will apply. This change will reduce any delay in realising the benefits from innovations allowing consumers access to the latest technology and manufacturers to benefit from any efficiency gains.

# What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option 0. Do nothing - this represents the status quo or business as usual. The production of the Smoke Control Regulations and Orders will continue to be burdensome to Government and create delays for industry in releasing their products to market and therefore recouping the cost of development.

Option 1. Amend the Clean Air Act 1993 via the Deregulation Bill to provide the Secretary of State with powers to authorise fuels and exempt appliances in England administratively by the publication of a list on Defra's smoke control web pages. This is the preferred option as it would allow products to be marketed almost immediately after receiving approval, therefore reducing burdens to industry.

#### Will the policy be reviewed? It will not be reviewed. If applicable, set review date: Month/Year

Does implementation go beyond minimum EU requirements?	N/A				
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.  Micro < 20 Yes Yes			Small Yes		
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)			Traded: N/A	Non-t N/A	raded:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:	Rory Stewart	Date:	30/09/2015
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# **Summary: Analysis & Evidence**

**Description:** 

#### **FULL ECONOMIC ASSESSMENT**

Price Base	PV Base	Time Period	Net	ue (PV)) (£m)	
<b>Year</b> 2012	<b>Year</b> 2013	Years 10	<b>Low:</b> £176,269	<b>High:</b> £1.04m	Best Estimate: £610,423

COSTS (£m)	<b>Total Tra</b> (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	<b>Total Cost</b> (Present Value)
Low	0		0	0
High	0		0	0
Best Estimate	£57,000			£57,000

#### Description and scale of key monetised costs by 'main affected groups'

No additional costs incurred by industry.

Initial cost incurred by Government is developing and maintaining robust web-based list of products that can be used in Smoke Control Areas - estimated to cost £57,000

Other key non-monetised costs by 'main affected groups'

BENEFITS (£m)	<b>Total Transition</b> (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	<b>Total Benefit</b> (Present Value)
Low	0		£27,100	£233,268
High	0		£127,975	£1,101,569
Best Estimate	0		£77,538	£667,423

#### Description and scale of key monetised benefits by 'main affected groups'

Social benefits from consumers and manufacturers being able to realise benefits of technological progress reducing production costs and improving functionality.

Government will not be required to produce 6 monthly SIs, resulting in admin savings of £6,100 per annum.

#### Other key non-monetised benefits by 'main affected groups'

It is considered unlikely that there will be significant changes in the price of appliances or fuels for the consumer but product choice may be slightly increased.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5%

The key assumptions are:

- at any one time 5% of products on the market will be newly exempted products
- the useful life of these technologies is assumed to be 10 years

#### **BUSINESS ASSESSMENT (Option 1)**

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: £0	Benefits: £0	<b>Net:</b> £0	Yes	Zero net cost

## **Evidence Base (for summary sheets)**

#### **Executive Summary**

The preferred option for amending the current system of exempting fuels and appliances which will allow products to be brought to market more rapidly, will result in zero increase in net cost to businesses and an estimated social benefit of  $\pounds476$ , 946. Consumers will benefit from the new process by quicker access to technological improvements and business will experience a shorter delay in realising efficiency improvements in the productive process for new appliances and fuels. Government is required to fund the required amendment to current business process at a one off cost of £57,000, however the avoided admin and legal input to produce the statutory instruments will also result in administrative savings estimated at £6,100 per annum.

#### **Background**

The Clean Air Act (CAA) was introduced in 1956 after a Government report into the great smog of 1952 which was caused by the widespread burning of coal and was blamed for the premature deaths of hundreds of people in the UK. The Act aims to control emissions of dark smoke, grit, dust and fumes from industrial premises and furnaces and to give Local Authorities power to designate and control Smoke Control Areas. Within a Smoke Control Area it is an offence to emit smoke from any chimney of a building (including domestic, residential and industrial premises) unless using a fuel or appliance assessed as operating smokelessly and thus approved for use in a Smoke Control Area. Currently exempted appliances and authorised fuels are listed in two Statutory Instruments, which are updated twice yearly. Manufacturers obtain a listing in the regulations by paying a fee to submit their products for testing by Defra technical advisors (currently Ricardo AEA) who subsequently make recommendations for inclusion in the legislation. Defra hosts current lists of fuels and fireplaces on their smoke control webpages.

#### **Current Legislation**

Clean Air Act 1993

Part III – Contains the provisions relating to Smoke Control Areas, exemption of appliances and authorised fuels. There are over 30 associated regulations in force in England that provide details of exempt appliances and authorised fuels.

Section 20 of the 1993 Act prohibits within a Smoke Control Area: a) the emission of smoke from a chimney of any building and b) the emission of smoke from any chimney serving the furnace of any fixed boiler or industrial plant.

Under Section 20(4) of the Act, there is a defence "to prove that the alleged emission was not caused by the use of any fuel other than an authorised fuel". The Secretary of State may declare under s20(6) a fuel to be authorised. Section 20(5) provides for fine up to level 3 (at present £1,000) on successful prosecution.

Under Section 21 of the Act, the Secretary of State may make an order exempting any class of fireplace from the Section 20 provisions if he is "satisfied that such fireplaces can be used for burning fuel other than authorised fuels without producing any smoke or a substantial quantity of smoke". Exemptions can be subject to conditions specified in the order.

#### Current implementation of Sections 20 and 21

Regulations and orders are regularly made by the Secretary of State. Each fireplace and fuel is separately listed in the relevant instrument by means of amendment of the previous regulations or order.

The procedure by which a manufacturer or supplier can obtain a listing in the regulations or order involves submitting a case to Ricardo AEA that, in essence, the authorised fuel can burn smokelessly, or the fireplace can operate without producing any smoke or a substantial quantity of smoke when operating in accordance with specified conditions (such as conditions as to the type of fuel that may be burned). Ricardo AEA make recommendations to the Secretary of State as to which fuels/fireplaces can

be added to the relevant instrument. Lists of approved fuels and appliances appear on Defra smoke control pages.

In practice, Ricardo AEA apply particular, long-standing technical criteria to test whether any fuel or fireplace will meet the criteria in Sections 20 or 21 of the Act. Manufacturers and suppliers must submit applications to them. Ricardo AEA charge a fee for considering each application. Ricardo AEA also provide limited pre-application advice, the first hour of which is funded by Defra.

#### Problem under consideration & rationale for intervention

As part of the Government's Red Tape Challenge, a commitment was made to simplify the process for authorising fuels and exempting appliances in England with the aim of reducing burdens for industry LAs and Government whilst protecting air quality.

Since the introduction of Smoke Control Areas, there has been a significant increase in the number of manufacturers and suppliers seeking exemption for wood-burning appliances. Feedback from Industry Representatives indicates that this is mainly as a result of rising gas prices (see the Digest of UK Energy Statistics available from <a href="https://www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes">https://www.gov.uk/government/collections/digest-of-uk-energy-statistics-dukes</a>) and the Government's drive to increase the uptake of sustainable fuels (see DECCs departmental objectives <a href="https://www.gov.uk/government/topics/energy">https://www.gov.uk/government/topics/energy</a>).

Feedback from industry indicated that although the cost of assessment by technical advisors was not considered a significant burden, the delay between testing the new product and obtaining a listing in one of the 6 monthly Statutory Instruments presented a problem in terms of getting a product to market and recouping development costs. The proposed intervention i.e. a new administrative system for exempting appliances and fuels would be more beneficial to businesses as it allows these problems to be addressed therefore resulting in reduced burdens for businesses and a reduced cost for Government in publishing Statutory Instruments. The new system will also benefit consumers by allowing new technologies to be brought to market more rapidly.

#### **Policy objective**

The current arrangements for obtaining an exemption have two significant disadvantages:

- a) manufacturers and suppliers have to wait for the next set of regulations or order before they can market their fuel or fireplace for use in a Smoke Control Area. If, for whatever reason, Defra's technical advisors are unable to process an application in time for a particular instrument, the business is faced with a further 6 month delay. This also postpones the marketing of new technologies which can benefit consumers and society generally.
- b) producing updated regulations and an order with a list of every approved fireplace and fuel is costly and time consuming for Government.

The intention is to amend Sections 20 and 21 of the Clean Air Act 1993 to enable the Secretary of State to publish a list of authorised fuels and exempted fireplaces in England on Defra's smoke control webpages without the requirement for Statutory Instruments. No change is planned to the criteria and standards currently applied by Defra contractors and once Ricardo AEA have confirmed a product's acceptance the published list will be updated with the product details.

#### Description of options considered (including do nothing)

#### Option 0 - Do nothing

Businesses would continue having to wait for the next 6 monthly Statutory Instruments before they can market their appliances for use in Smoke Control Areas. This is an unnecessary burden for them and also limits consumer choice. Production of the Statutory Instruments would continue to be burdensome for Government and there would still be the risk of human error where recommendations in the SI might be overlooked, resulting in an appliance having to wait for a further six months before receiving exemption.

# Option 1 Remove the requirement for approved fuels and exempted fireplaces to be listed in six monthly SIs and amend the CAA to give Secretary of State power to publish the list of products administratively

This is the preferred option as it reduces burdens for both industry and Government and benefits consumers. Manufacturers would still be required to demonstrate that their products met emissions standards, thereby safeguarding air quality. Amending the Clean Air Act to permit the Secretary of State to publish a list of authorised/exempted products in England as required will provide a quicker route to market and reduce burdens on industry which are currently created by extensive lead-in times between product testing and exemption. It will also provide social benefits by allowing the new technologies to be placed more rapidly on the market. Government also stands to benefit from the new system by negating the requirement for updated SIs every 6 months.

# Monetised and non-monetised costs and benefits of each option (including administrative burden)

#### Option 0

Continued cost to manufacturers of having their appliances and fuels test house data scrutinised by the Defra contractors.

The consumer and industry benefits missed by manufacturers not being able to market their appliances in between the two six-monthly commencement dates. Interest accrued by delay in recouping product development costs.

Continued costs to Government for the contracted management of the existing exemption scheme by Ricardo AEA . Government resource and administrative costs arising from the production of the twice-yearly orders.

These costs represent the baseline against which Option 1 is compared.

#### Option1

#### Costs

No change in cost to manufacturers of having their appliances tested and assessed by technical advisors

Cost to Defra in developing and maintaining the robust web-based list detailing products which can be used in Smoke Control Areas. Initial estimates suggest this would cost in the region of £57,000.

#### **Benefits**

The key monetised benefits of this option are the social benefits of allowing new products to market sooner. This is expected to benefit consumers of these technologies which range from small wood burning stoves/ boilers to larger installations and pizza ovens. Allowing these products to the market is expected to provide social benefits through two potential pathways:

- Increased efficiency –these may occur through either a reduction in the purchase price or a fall in the operating costs.
- Changes in characteristics new products may provide a different service that may be more highly valued by consumers. For example redesign of appliances may make them more aesthetically pleasing to customers.

These social benefits have been assumed to accrue directly to consumers rather than to suppliers. This assumption has been made on the basis that in the long term we would expect competition to drive the benefits of such innovation to consumers. During this process there are expected to be benefits to innovative dynamic suppliers but costs to other market participants. No assessment of the net effect of this change in the competitive environment has been assessed.

Business will also benefit from the new process by reducing the delay between obtaining a recommendation from Defra technical experts and inclusion of the products in 6 monthly Orders and Regulations. It has not been possible, however, to monetise this benefit.

Evidence from Industry Representatives indicates that in the UK, 175,000 room heaters and 2,000 biomass boilers are sold each year.

Room heaters are estimated to retail at between £400 and £2,500 each and biomass boilers at between £7,000 and £25,000, placing the value of this market at between £84 - £488 million per annum. However, only a minority of this market will be affected by these changes. Based on expert judgement (provided by Ricardo-AEA – technical consultants contracted to Defra to provide advice on appliances and fuels) it is estimated that only 5% of these technologies in Smoke Control Areas would be newly exempted models. This places the value of the impacted market at between £4 – £24 million per annum.

The benefit to this market has been calculated based on the rate of technological improvement and the additional speed at which the technologies arrive on the market. The technological improvements are intended to reflect all the progress in the technology including improvements in functionality, design, efficiency, operation and cost reductions. In relation to the rate of improvement a small but noticeable change of two per cent per year has been assumed. This rate is based on the assumption that in the long term the improvements in this market occur in line with the long term average growth rate. This figure has been used to provide an indicative estimate as changes below this level are unlikely to be noticeable and hence it is improbable they would be brought to market for much smaller changes. It is further assumed that on average removing the release restriction would increase speed to market by three months. This improvement is based on moving from two annual releases to a relatively steady release pattern over the year.<sup>1</sup>

In addition there are expected to be administrative savings by Defra for admin and legal input for producing the six-monthly SIs. Based on employment grades (as shown in brackets) this currently equates to 3 days (AO) 12 days (HEO), 1 day (G7), 10 days (G7 Lawyer), 1 day (SCS), 1 day (SCS Lawyer) per annum= approximately £6,100 per year. This has been estimated based on experience of the internal resources required and valued using hourly pay costs from the Annual Survey of Hours and Earnings (ASHE) for 2011, uplifted to 2012 prices and for an assumed overheads at 30%. The ASHE provides costs for AO and SCS levels. Costs for G7 and G7 lawyer were valued using costs in ASHE for lawyers and HEO were assumed to be the mid-point between G7 and AO.

Using this approach, the benefits of this option are presented in table 1 below.

		Annual benefits			
	Social	Government – admin savings	Total		
Low	£21,000	£6,100	£27,100	£233,268	
High	£121,875	£6,100	£127,975	£1,101,569	
Average	£71,438	£6,100	£77,538	£ 667,423	

Table 1: Benefits of Option 1.

#### Rationale and evidence that justify the level of analysis used in the IA (proportionality approach)

The net financial benefits of this change is considered to be low therefore the level of analysis performed is proportional to this the level of anticipated change

#### **Risks**

This proposal may be criticised on the grounds that it reduces parliamentary scrutiny of the process of authorising fuels and exempting fireplaces. This could give rise to controversy because whether a fuel/fireplace is authorised/exempt can determine whether offences have been committed under sections 20 and 23 of the Clean Air Act 1993. The Department's justification for this proposal is that the authorisation/exemption process will remain essentially unchanged with the same testing being carried

<sup>&</sup>lt;sup>1</sup> A three month improvement is based on the assumption that products become ready for the market throughout the year and are currently delayed for release until it can be listed in the SI. With updating occurring twice a year the average expected delay is half the maximum delay of six months.

out. Authorisations/exemptions will continue to be available on the Defra smoke control web pages. The Department would also point to analogous provisions in other legislation e.g. Section 1 of Ancient Monuments and Archaeological Areas Act 1979 requires the Secretary of State to compile and maintain a schedule of monuments of national importance. The consequence of including a monument in the schedule is that various provisions in the Act apply to that monument including provisions making it an offence to allow certain works to be performed on scheduled monuments unless the works are authorised under the Act

#### One-In, Two-Out

The amendment to the CAA allows the Secretary of State to approve appliances and fuels for use in Smoke Control Areas by the publication of a list on Defra's smoke control webpages. Once the list is in place, it will no longer be necessary to lay a new SI every 6 months for approved appliances and fuels. Option One is considered Zero Net Cost to business as the key beneficiaries of the preferred option are consumers and society in general, with any benefits to industry being of an indirect nature and therefore not quantifiable. While businesses will be direct beneficiaries these benefits are not quantifiable as they relate to a small reduction in the time for new products to get to market. This classification as being zero net cost has been validated by the RPC.