

19 December 2017

SUBMISSION ON CLEAN GROWTH STRATEGY

General

Make UK and UK Steel welcome the release of the Clean Growth Strategy showing how the government intends to meet the UK's fourth and fifth carbon budgets. We are pleased to see a broad ranging report that ties into the wider Industrial Strategy and has some clear timelines. Additionally, we are pleased to see the tone of the Strategy is opportunities focussed, manufacturers welcome this focus and stand ready to constructively draw out these opportunities.

At the moment the majority of our members feel climate change policy creates burdens rather than opportunities, with over 80% feeling climate change policy leads to additional regulatory burden and over 70% feeling climate change policy pushes up their energy costs (2016 EEF member survey). These kinds of concerns are especially strong among energy-intensive industries that trade internationally and/or have limited immediate emissions reduction options. Here there is very genuine concern about carbon leakage or loss of investment to overseas plants.

Our members do recognise there are opportunities associated with climate change policy, with the majority feeling climate change policy helps open up new markets, such as wind turbine components or electric car parts. However, the numbers here are lower than those viewing climate change as a risk.

EEF Members views on Climate Change Policy

Climate change policy	Agree	Disagree
Leads to additional regulatory burden	85%	15%
Pushes up energy costs	75%	25%
Helps to open up new markets	70%	30%
Gives us an opportunity to distinguish our products from competitors	30%	70%

(2016 EEF member survey)

Make UK and UK Steel appreciate the Strategy's recognition of the need for government support for industry in certain areas, including energy efficiency, heat reuse, and carbon capture, utilisation and storage. Industry has achieved huge energy efficiency gains to date and wants to be part of a low carbon future. The provision of government support will enable short-term barriers to this to be addressed while improving UK competitiveness.



The Industrial Strategy White Paper has identified four Grand Challenges; one of which is maximising the advantages for UK industry from the global shift to clean growth. We are pleased to see this challenge presented in the White Paper. We would like to work with government in a collaborative way to move the initiatives contained in the Clean Growth Strategy and the White Paper to delivered outcomes.

However, we note that certain parts of the Strategy lack detail and are rather vague at this stage. This has prevented as full an analysis of its content and likely impact on manufacturing as we would have liked.

Provided below are some comments on specific components that are relevant for our sector.

Overall ambition: Emissions Intensity Ratio

The Government have developed the Emissions Intensity Ratio that measures the amount of greenhouse gases (tonnes of carbon dioxide equivalent) produced for each unit of Gross Domestic Product (GDP) created.

Make UK and UK Steel appreciate the intent of utilising such a metric, however its use may be misleading if it doesn't account for shifts in the economy that might underpin the changes seen in the data. For instance, the loss of manufacturing and its replacement with additional service-related activities.

The UK's direct greenhouse gas emissions have fallen substantially since 1990 but most of this progress has been wiped out by increases in the total carbon footprint of the goods and services we import. If 'imported carbon' is taken into account, the UK's total carbon footprint only appears to have dropped by 7 percent between 1997 and 2014 (UK's Carbon Footprint 1997 – 2014, Defra, 2017).

It is reasonable for UK policymakers to focus primarily on direct emissions as that is where they can have the biggest impact, but greater attention must be paid to ensuring UK emissions are not effectively being exported overseas, especially to countries with lower emissions standards.

The Emissions Intensity Ratio should be accompanied by underlying data showing whether emissions have genuinely fallen or there has been a change in economic structure.

Government should do far more to track 'imported carbon' emissions and begin to consider how they can be addressed through the Clean Growth Strategy and any associated metrics.

Energy Efficiency Goal

The Government will develop a package of measures to support businesses to improve how productively they use energy and will consult on this in 2018, with the aim of improving energy efficiency by at least 20 per cent by 2030.



This is one of the main elements of the Strategy for our members so Make UK and UK Steel look forward to seeing more details of the target and how government plans to support businesses to meet it.

We do welcome the focus on energy efficiency which has a tendency to get overlooked in favour of more glamorous decarbonisation options, despite being among the most cost effective options.

However, we are concerned that the 20 percent goal is vague with no details presented on the baseline or the metrics proposed to measure it. Businesses' emissions encompass a range of different sources including buildings and industrial processes. The package of measures presented with the 20 percent goal are predominantly building related which further concerns us if this implies the target will still apply even if support measures such as an Industrial Energy Efficiency Scheme are not available to help overcome the known barriers to energy efficiency in our sector.

Make UK and UK Steel have conducted research, including analysis of audits carried out under ESOS, to estimate the cost effective (pay back periods under 4 years) electricity efficiency potential remaining in the UK manufacturing sector. We found that an estimated 14% in electricity efficiency is still remaining. However, a survey of members has found that under the current policy framework, much of this potential will remain untapped. Just 34% of manufacturers felt that ESOS audits had provided them with new information, indicating that most companies are already aware of many energy savings opportunities, but for a number of reasons are not taking them.

Addressing these potential inefficiencies is entirely possible, especially with strong support from government and as such we recommend the detail of measures to support businesses to improve energy efficiency includes appropriate measures for the manufacturing sector.

Establish Industrial Energy Efficiency Scheme

The Government will establish an Industrial Energy Efficiency Scheme to help large companies install measures to cut their energy use and their bills.

Make UK and UK Steel welcome the commitment to establish an Industrial Energy Efficiency Scheme to improve the energy security and productivity of UK firms and cost effective decarbonisation, and were therefore very disappointed not to see it emerge in any of the autumn's policy announcements. It is notable, 19 European countries have already introduced schemes in this area.

While the electricity sector has received significant financial support to decarbonise, industrial firms have not, even though industrial energy efficiency could contribute to the UK decarbonisation agenda at a lower cost than most electricity sector initiatives. Over 60% of manufacturers cite payback periods being too long as a reason to reject possible energy management or energy efficiency measures. This is in spite of UK firms already facing amongst the highest electricity costs in Europe.

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Government should effectively deliver the Industrial Energy Efficiency Scheme as a matter of urgency, ensuring full consultation with manufacturers.

Reporting/Monitoring Schemes

The Government will simplify the requirements for businesses to measure and report on energy use, to help them identify where they can cut bills. The Government will continue with plans to close the CRC Energy Efficiency Scheme following the 2018-19 compliance year. They will drive energy efficiency by implementing the previously announced increase to the main rates of the Climate Change Levy from 2019. The Government will undertake an evaluation of the Climate Change Agreements to inform any successor scheme from 2023. The Government will build on existing schemes such as the Energy Savings Opportunity Scheme (ESOS), undertaking a comprehensive assessment of its effectiveness and consider any future reforms. Alongside this Strategy, the Government are consulting on a new and streamlined energy and carbon reporting framework to replace some existing schemes, such as the reporting element of the CRC Energy Efficiency Scheme, and align with mandatory annual greenhouse gas reporting by UK quoted companies.

Make UK and UK Steel have provided a separate submission to BEIS on the 'Streamlined Energy and Carbon Reporting' consultation.

Our members are subject to numerous environment and climate related reporting and notification obligations. This currently includes: reporting on the CRC Energy Efficiency Scheme; reporting on Climate Change Agreements; reporting for the EU Emissions Trading Scheme; audit requirements to comply with the Energy Savings Opportunity Scheme; reporting for the greenhouse gas reporting regulation; collection of monitoring data to comply with requirements on Environmental Permits; and providing annual releases of pollutants for the Pollutant Release and Transfer Register.

These schemes are coordinated by different government departments, they have different scopes, and they require reporting in different forms and at various specific times, which creates an administrative burden for our members. Additionally guidance material on many of these reporting obligations is often complex, so the time and resource taken to understand it adds to the administrative burden. On top of that, any system changes to these schemes creates additional administrative burden as members need to invest time in learning the changes, understanding them, and amending internal data collection processes.

Make UK has conducted research on members' views of energy efficiency and energy reporting. Overall more of our members view energy reporting as a burden rather than a means for identifying opportunities.



Make UK and UK Steel appreciate and support the intent of having a reporting scheme that is set with the objective that if you want to manage/ minimise something, you need to measure/ report it. However the current reporting environment is complex with significant overlaps.

Any system review should not be done in isolation, but in entirety so that a truly efficient reporting system can be developed. Additionally, given the uncertainties associated with Brexit and the EU ETS, implementation of a new reporting scheme would be best rolled out when there is more time for scrutiny and certainty on the longevity of the resulting mechanism.

Make UK and UK Steel support the closure of the CRC Energy Efficiency Scheme following the 2018-19 compliance year.

Make UK and UK Steel recommend the Government undertakes an evaluation of all schemes in entirety to develop a centralised single reporting scheme at least regulatory burden for reporters.

Publish Action Plans

Alongside this Strategy, the Government have published joint industrial decarbonisation and energy efficiency action plans with seven of the most energy intensive industrial sectors, building on three years of joint industry-Government co-operation. These action plans identify steps by industry and Government that can be taken now to support long term low carbon growth, energy efficiency and emissions reductions on a sector by sector basis. These include the sharing of best practice and innovation opportunities, including through a new online portal, facilitating dialogue to improve access to finance and cross-sector consideration of the best uses of biomass across industry.

Make UK and UK Steel are supportive of the collaborative process the government utilised in the initial development of the Decarbonisation and Energy Efficiency Roadmaps. Quality material that had potential to achieve practical outcomes was produced then through a collaborative approach. The Action Plans are a good first step to realising the roadmaps but we are concerned about their limited timespan.

Make UK and UK Steel would like to see the original Roadmaps taken forward over the longer term. We also support collaborative processes being utilised in further developing the plans detailed in the Strategy.

Carbon Capture and Storage

The Government will demonstrate international leadership in carbon capture usage and storage (CCUS), by collaborating with global partners and investing up to £100 million in leading edge CCUS and industrial innovation to drive down costs. The Government will work in partnership with industry, through a new CCUS Council, to put us on a path to meet our ambition of having the option of deploying CCUS at scale in the UK, and to maximise its industrial



opportunity. The Government will develop a framework to support the long term low carbon development of energy intensive industrial processes, such as CCUS and electrification.

We are pleased to see the revived interest in this area. CCUS is seen as vital to meeting the UK's carbon targets at least cost. The Committee on Climate Change has suggested that meeting the UK's 2050 target would be twice as expensive without it.

Lord Oxburgh's 2016 report to the Secretary of State looked at the business model barriers for companies wishing to engage CCUS. It highlighted the challenges of multiple organisations across the CCUS value chain (capture, transport and storage) having to individually negotiate the business case for the investment chain. The report recommended the role for a Government-owned entity in transport and storage, to help de- risk and reduce complexities of delivering transport and storage infrastructure, which provide a wider societal benefit.

This previous piece of work has been essential for understanding logistical requirements for implementation of CCUS. We recommend that the new CCUS Council refer to this and other existing pieces of work to act as a framework for deploying CCUS.

Make UK and UK Steel recommend the Government provides strong support mechanisms for CCUS and further considers Lord Oxburgh's recommendation for establishing a Government owned entity in transport and storage.

Support Heat Recovery

The Government are consulting on the design of a new industrial heat recovery programme. This £18 million fund will encourage investment by manufacturers to recover and reuse heat from industrial processes that would otherwise be wasted.

Make UK and UK Steel welcome the Industrial Heat Recovery Support Programme. We have provided a separate submission to BEIS for the consultation on the Industrial Heat Recovery Support Programme.

Innovation

The Government will invest around £162 million of public funds in research and innovation in Energy, Resource and Process efficiency, including up to £20 million to encourage switching to lower carbon fuels. The Government will support innovative energy technologies and processes with £14 million of further investment through the Energy Entrepreneurs Fund. The Government expects to invest around £162 million of innovation funding out to 2021, in research, development and demonstration of energy, resource and process efficiency alongside better low carbon fuels and CCUS. This includes: • Energy efficiency: to drive down the cost of new technologies to integrate them into existing processes and improve performance without affecting reliability. The Government is providing £9.2 million for



an Industrial Energy Efficiency Accelerator, to help reduce the emissions from UK industry by increasing the commercially viable options available. • Processes, resource and material efficiency: Over time we will need to replace materials which are energy intensive to produce with lower carbon ones at competitive prices, known as "advanced materials". Government will work through Industrial Strategy sector deals and the Industrial Strategy Challenge Fund to stimulate innovation in advanced materials. We will also need to encourage more resource efficient business models, extend product life and reduce waste volumes. The Industrial Digitalisation Review will investigate how the design, development and deployment of digital technologies can drive increased national productivity. • Fuel Switching: Firing industrial processes with low carbon fuels (such as hydrogen) is currently viewed as prohibitively expensive and disruptive. Innovation can prove the viability of these fuels without impacting operations. Government will invest up to £20 million in competitions from 2018, initially for research followed by competitions for demonstrator projects across industry.

Make UK and UK Steel welcome the investment commitment for research and innovation. However, the exact breakdown of the £162 million of funding for research and innovation is difficult to determine from the Strategy and without more details it is difficult to comment on the appropriateness of the distribution of the funds.

We are very concerned to see overlapping funding announcements. For example, the Industrial Energy Efficiency Accelerator, a programme released prior to the Clean Growth Strategy, is contained as an initiative in the £162 million innovation fund as well as a component of the £100 million Carbon Capture Utilisation and Storage programme. This has created a degree of scepticism among manufacturers regarding the rest of the funding package.

Nonetheless, Make UK and UK Steel have provided previous support for the 'Industrial Energy Efficiency Accelerator', including information dissemination sessions and promotion to members. We would like to continue to work with government in a collaborative approach for progressing research and innovation initiatives.

Green Finance

The Government will provide up to £20 million to support a new clean technology early stage investment fund.

Make UK and UK Steel appreciate the intent of providing a new clean technology early stage investment fund. Without substantial details of the fund provided in the Strategy it is difficult to comment on how the structure of the fund should be established and whether £20 million is a sufficient amount.

Member companies were also disappointed by the Green Investment Bank when it first started as they focussed on larger projects with nothing suitable provided to industrial manufacturers for plant improvements. Green Finance initiatives in the Clean Growth Strategy need to address these barriers and provide appropriate opportunities for manufacturers.



Additionally, it is noted that representation on the recently launched Green Finance Task Force consists mostly of finance sector representatives. We recommend that the Task Force should have more industry representation who understand the financing needs of manufacturing, particularly in light of the decarbonisation agenda.

Remains Committed to Carbon Pricing

The Government remains committed to using carbon pricing as an emissions reduction tool and will ensure that a clear price signal continues to incentivise industrial emissions reduction.

Make UK and UK Steel note the Government's commitment to carbon pricing. However, we are disappointed not to have a more definitive steer on which of the many options for regulating greenhouse gas emissions currently covered by the EU Emissions Trading System after Brexit are under the most serious consideration.

This issue is key to scheme participants as decisions on post-2019 investment are already being taken. Some kind of signal of government intention is urgently needed even if this is in the form of a range of different scenarios.

Government's inability to provide any signal as to the options being considered is also limiting the advice we can offer on scheme design. Its apparent willingness to listen to industry on this issue is welcome but we have reached a point where there is little else constructive that we can say without more to work from.

On the plus side, the steer provided on total carbon pricing in the context of the Budget is helpful in that it provides greater certainty and, assuming that EU ETS prices rise, reduces the unhelpful disparity between UK and EU prices.

Make UK and UK Steel would appreciate more constructive dialogue with government as soon as possible on its planned approach to greenhouse gas emissions regulation across the economy over the longer term. The current picture is very complex and any opportunity for simplification would be welcome.

EU Products Policy

The Government will continue to support EU products policy which sets minimum standards for a range of products such as white goods and lighting, which improve energy efficiency and help customers make informed choices.

Make UK and UK Steel welcome the government's plan to keep step with new EU ecodesign standards. This is important as the standards, which cover products like washing machines and kettles, but also some industrial equipment, are currently set at the level of least-lifetime cost to consumer, saving consumers money while helping achieve environmental goals. They apply to all products placed on the market and at EU level they and linked rules on energy labelling are expected to save 175 million tonnes of oil equivalent — equivalent to the primary energy consumption of Italy — by 2020. They are also increasingly mirrored in other parts of the world. The government must



stick to this commitment, absorbing criticism, and consider other product-based regulatory regimes which need the same approach.

We would like government to prioritise ease of trade in its approach to environmental regulation and to make sure manufacturers are not making multiple products for multiple markets.

Respond to Helm Review

The Government will respond to the forthcoming independent review into the cost of energy led by Professor Dieter Helm CBE.

Make UK and UK Steel note the Government will respond to the Helm Review. We have provided a separate submission to BEIS on the 'Call for Evidence following the Helm Review'.

Getting the price of electricity right for UK firms is fundamental to achieving the aims of the Industrial Strategy, and without due consideration could also undermine the wider success of the Clean Growth Strategy. While Professor Helm's Independent Cost of Energy Review is an important contribution to recognising and resolving the real, substantial disparity that UK industrial firms face compared to key competitors, we are concerned that the solutions proposed are all focused on the medium to long term. They are also highly interlinked and, in the case of carbon border taxes, unlikely in the current policy context, and are generally in need of rigorous testing. It is also not clear that this is an appropriate time for the UK to embark on such major system change.

The announcements in the Budget around carbon pricing and controls on the cost of low-carbon levies are an important step towards providing clarity and managing costs in the next decade. However, for the most energy intensive sectors, more immediate steps are needed. This is true not just of policy costs but also network charges, to which major changes are due.

We would urge government to provide definitive measures to address uncompetitive electricity prices in the short term.

New Resources and Waste Strategy

The Government will publish a new Resources and Waste Strategy to make the UK a world leader in terms of competitiveness, resource productivity and resource efficiency. The Government will set out a new Resources and Waste strategy which seeks to maximise resource productivity, reduce waste in our energy and resource systems, promote well-functioning markets for secondary materials and incentivise producers to design better products. The strategy will focus on three key areas: • Maximising resource productivity - through more efficient manufacturing processes • Maximising the value we get from resources throughout their lifetimes - by designing products more smartly to increase longevity and enable recyclability • Managing materials at end of life – by targeting environmental



impacts The Government will explore how data can support the development of a network of resource efficiency clusters led by Local Enterprise Partnerships (LEPs), whereby LEPs would develop local level strategies to drive greater resource efficiency, supporting processes such as industrial symbiosis and the development of new disruptive business models that challenge inefficient practice. The Government will explore how to better incentivise producers to manage resources more efficiently through producer responsibility schemes.

Make UK and UK Steel look forward to seeing the details of the new Resources and Waste Strategy. We appreciate the intent to maximise resource productivity, reduce waste in our energy and resource systems, promote well-functioning markets for secondary materials and incentivise producers to design better products.

This is particularly important to manufacturers at the moment as input costs are high and a real concern for a post-Brexit future. More efficient manufacturers will be more resilient.

In developing the Strategy it is essential that the government looks not just at end-of-life materials but also at the way manufacturers are increasingly exploring ways of retaining or regaining valuable resources through innovative business models such as servitisation and remanufacturing. These approaches can be preferable to recycling for many materials and every effort should be made to facilitate innovation in this area and ensure there are no regulatory barriers. In addition, current waste policy can have major implications for anyone looking to reuse or reclassify a waste so that it can be used as a product by someone else.

Make UK and UK Steel support the development of a network of resource efficiency clusters led by LEPs, noting that any additional workload for LEPs should be balanced with appropriate resources.

Low Carbon Transport

The Government will develop the electric vehicle charging network by:

- Investing an additional £80 million, alongside £15 million from Highways England, to support charging infrastructure deployment
- Taking new powers under the Automated and Electric Vehicles Bill, allowing the Government to set
 requirements for the provision of charging points The Government will work to enable cost-effective options for
 shifting more freight from road to rail, including using low emission rail freight for deliveries into urban areas,
 with zero emission last mile deliveries. The Government will invest around £841 million of public funds in
 innovation in low carbon transport technology and fuels including:
- Ensuring the UK builds on its strengths and leads the world in the design, development and manufacture of electric batteries through investment of up to £246 million in the Faraday Challenge
- Delivering trials of Heavy Goods Vehicle (HGV) platoons, which could deliver significant fuel and emissions savings



Make UK and UK Steel note the support provided for low carbon transport. Within our sector there are important considerations that need to be made for the provision of low carbon transport, including capacity issues associated with charging electric vehicles at manufacturing sites. Additionally it needs to be recognised that many of our members are reliant on Heavy Goods Vehicles for distributing their products and the Strategy must recognise the necessity of their transport role and ensure low carbon options for these vehicles are developed.

ABOUT

Make UK

Make UK champions British manufacturing. We are powerful voice at local, national and international level for small and medium sized businesses and corporates in the manufacturing and engineering sectors.

We're determined to create the most supportive environment for UK manufacturing growth and success, and we present the issues that are most important to our members, working hard to ensure UK Manufacturing remains in the government and media spotlight.

Together, we build a platform for the evolution of UK manufacturing.

UK STEEL

UK Steel champions and celebrates the UK's steel manufacturers. We represent the sector's interests to government and champion our innovative, vibrant and dynamic industry to the public.

Together, we build the future of the UK steel industry