

Draft Scottish Energy Strategy: The Future of Energy in Scotland

Response from the Energy Intensive Users Group

The Energy Intensive Users Group (EIUG) represents the UK's energy intensive industries (EIIs) including manufacturers of steel, chemicals, fertilisers, paper, cement, lime, glass, ceramics, gypsum, glass, aluminium and industrial gases that compete in global markets and depend on access to secure, internationally competitive energy supplies to remain in business. These foundation industries employ 200,000 people directly, support 800,000 jobs including their supply chains, and make a £15bn pa contribution to UK GDP.

EIUG welcomes the acknowledgement in the consultation paper that the industrial sector accounts for more than half of Scotland's exports and expenditure on business research and development. We also welcome the clear statement that the Scottish Government is committed to protecting domestic industries at risk of 'carbon leakage' – a concern for all the industries EIUG represents.

We agree that industry in Scotland can play a leading part in UK efforts to decarbonise, in part at least through greater energy efficiency. However, it should be noted that EIIs already have clear commercial incentives to use energy efficiently and have invested heavily over many years to maximise their efficiency. The potential for further efficiency savings in these sectors is therefore very limited, and unlikely to be of the same order of magnitude as the increases to these particular businesses in energy costs that is likely to arise as a result of climate policies. This suggests policymakers should focus their attention on non energy intensive businesses, the public sector and the domestic sector, where the potential for significant energy efficiency improvements is greatest.

It is also worth noting that UK industrial electricity prices are amongst the most expensive in the EU, so electricity intensive industries located in Scotland already face a significant competitive disadvantage that cannot be overcome through additional efficiency measures alone. The UK government's compensation package for EIIs only partially addresses this competitiveness gap – not all EIIs are eligible for this relief on the same basis as their EU competitors, and those that do receive this relief are only partially compensated for the rising impact of unilateral UK climate policies on UK electricity prices. Further price rises – e.g. as a result of additional climate policy costs, or restrictions on indigenous energy production in Scotland, will simply make this situation even worse.

EIUG would urge caution in setting an energy efficiency target for Scotland. For the industrial sector, where an absolute cap on energy use would limit growth, a relative target (e.g. one linked to specific energy consumption as in Climate Change Agreements) would be more appropriate.

EIUG would also urge the Scottish Government to avoid setting arbitrary targets for specific energy technologies (e.g. for the proportion of consumption to be met from renewables). The environmental priority should be achieving decarbonisation in a cost effective manner, not specifying the means by which this is to be achieved. If energy prices are to be internationally competitive, and hence allow EIIs to remain located in Scotland, low carbon energy supplies will need to be procured at least cost to consumers. This is most likely to be achieved by allowing the market flexibility in delivering an energy mix that is consistent with the UK and Scottish governments' ambitions for decarbonisation.

EIUG is concerned therefore with the suggestion that 50% of Scotland's energy consumption should be met from renewable sources by 2030.

Scotland already has considerable renewable electricity capacity, which will doubtless continue to grow in the 2020s and possibly beyond. However, most of this is currently heavily subsidised by, and therefore expensive for, industrial and domestic consumers alike, and although it is fair to recognise that costs for new renewable electricity are falling, it is likely consumers will continue to pay a premium for renewable electricity for many years to come. In addition, consumers are paying for the cost of providing conventional backup (e.g. gas fired) to ensure security of supply during periods of low wind or solar output. Alternatives such as biomass generation do not suffer from intermittency, but are limited in terms of deployment for other environmental reasons, and put a strain on the availability of essential raw materials needed by other industries (e.g. paper and pulp manufacturers). Battery storage has improved rapidly and is already playing a significant role in providing short term backup, which is encouraging, but this technology is in no position to provide seasonal storage on the scale currently provided by gas or other conventional power generation.

The situation for renewable heat, however, is even more problematic. There is as yet no practical renewable alternative to gas heating that can be deployed at scale, or acceptable cost in high temperature industrial processes. Unfortunately biogas alternatives are very limited in scale and relatively expensive – and electrification of heat is more expensive still (for industrial users, the cost of electricity is currently up to five times that for gas per kWh). Furthermore, it needs to be recognised that gas is an essential fuel for many EIs, including a number of industries that operate continuous processes, and is an irreplaceable feedstock for the chemical industry. It is possible that CCS may enable industrial gas use, or the production of hydrogen, to be decarbonised – but unfortunately government support for demonstration projects has not yet been forthcoming. We hope that such projects will be supported in Scotland so their potential can be properly assessed.

Finally, we hope the Scottish Government will reconsider the current moratorium on shale gas production as a result of the current ‘talking fracking’ consultation. Advocates and opponents of this technology have sometimes been guilty of exaggeration, which has not been helpful in terms of the quality of debate on this subject. Shale gas development would not cause energy bills in Scotland to plummet as they have done in the USA, for example – but nor need it have a detrimental environmental impact, particularly if subject to appropriate controls under the direction of a respected regulator such as the SEPA, recognising that alternative sources of supply such as imported LNG are likely to have a considerably higher carbon footprint. EIUG believes it would be wise to recognise the potential economic benefits to EIs, other gas users and taxpayers of the environmentally responsible development of Scottish shale gas resources and hopes that, on reflection, the Scottish Government will come to the same conclusion.