

‘NET ZERO’ GHG EMISSIONS FROM UK PRODUCTION BY 2050

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This paper investigates the veracity of the claims made in the three main policy documents forming current energy and environment strategy in the UK:

- a) “Net Zero: The UK’s Contribution to Stopping Global Warming”, Committee on Climate Change (CCC), May 2019

“But net-zero is a more fundamental aim than previous targets. By reducing emissions produced in the UK to zero, we also end our contribution to rising global temperatures.” [p.8]

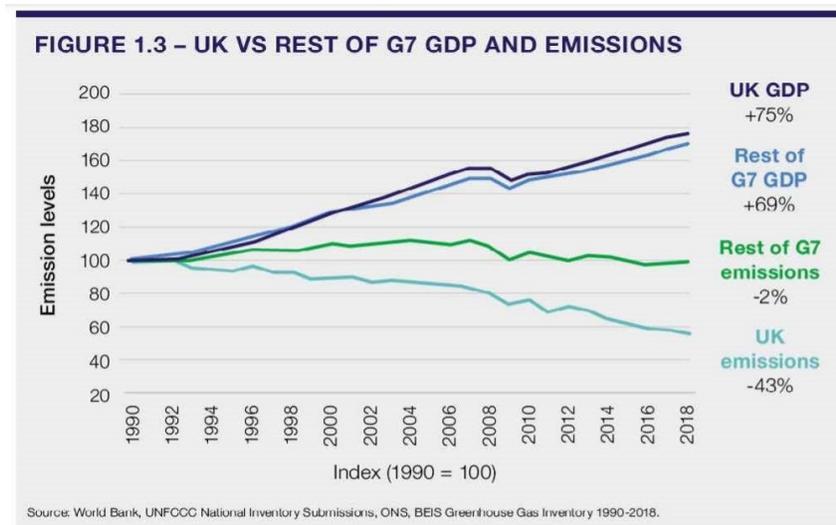
- b) “The Ten Point Plan for a Green Industrial Revolution”, HMG, November 2020

“We have led the G7 countries in cutting emissions since 1990.” [p.4]

“Britain is already leading the way. Over the last 30 years, we have shown that economic success and environmental responsibility go hand in hand. We expanded our GDP by 75% while cutting emissions by 43%.” [p.5]

- c) “The Energy White Paper - Powering our Net Zero Future”, BEIS, December 2020

“No one doubts the challenge of achieving net zero emissions, but the UK is able to build on 30 years of successfully reducing emissions while simultaneously growing our economy. Between 1990 and 2018, emissions fell by 43 per cent while GDP rose by 75 per cent, with the UK decarbonising faster than any other G20 country since 2000 (Figure 1.3).” [p.8]



These three excerpts from the three policy documents, that are now effectively the UK Government’s Energy & Environment Strategy, show that this policy is based on an illusion – that the UK has already achieved great success in reducing GHG emissions.

By contrast, take the following two quotations from 2009:

““Greenhouse gas emissions created by Britons are probably twice as bad as figures suggest”, says the government’s new chief energy scientist.

Professor David MacKay told the BBC that reductions in carbon dioxide emissions since 1990 are “an illusion”.

“Our energy footprint has decreased over the last few decades and that’s largely because we’ve exported our industry,” he said. Developing countries now made the goods that Britain buys, he added.’

Source: BBC News – 30 September 2009

“If carbon outsourcing is factored back in, the UK’s impressive emissions cuts over the past two decades don’t look so impressive anymore.”

“Rather than falling by over 15% since 1990, they actually rose by around 19%. And even this is flattering, since the UK closed most of its coal industry in the 1990s for reasons unrelated to climate change.”

Professor Dieter Helm, Oxford University, September 2009

So, despite this being public knowledge for the past decade, the UK Government still refuses to acknowledge these facts and continually overclaims on how well the UK has done in comparison with other G7 and G20 countries. In comparison with those countries, the UK is considerably more ‘deindustrialised’ and purchases a much greater level of consumer goods from developing countries. By this means, we have effectively ‘offshored’ most of our manufacturing (labour and materials) costs as well as all of the GHG emissions involved with the manufacture, production and shipping of those products; these are invariably ignored in the compilation of the UK’s GHG emissions data. Indeed, until recently, when the consumer products reached their ‘end of life’ and became waste, rather than incur the costs and emissions of recycling and/or recovery in the UK, our waste has been shipped to other countries, particularly in the Far East (incurring further GHG emissions which are not accounted for) to be dealt with there and to contribute further to the already alarming levels of emissions there.

Small wonder then, that the UK can boast of rapidly falling emissions since 1990, with high growth in GDP over the same period (Fig. 1.3 above). At the very least, this is a dishonest claim – climate change is a global issue and is in no way resolved by creative accounting on behalf of one relatively small nation.

Using figures provided within the CCC’s Report, it is evident that, over the two decades from 1996 to 2017, although the UK’s territorial emissions fell 269 MtCO₂eq from 741 MtCO₂eq to 472 MtCO₂eq, this was matched by a rise in import-related emissions from 96 MtCO₂eq to 312 MtCO₂eq, giving a reduction of consumption emissions, currently at 784 MtCO₂eq, of only 53 MtCO₂eq.

These data are reproduced in graphical form in Fig.2 and if compared with Fig.1.3 above, demonstrate quite clearly that the UK’s performance over the same period is not really that different from other G7 countries; one is reminded of Mark Twain’s famous dictum: “There are three kinds of lies: Lies, Damned Lies and Statistics!”

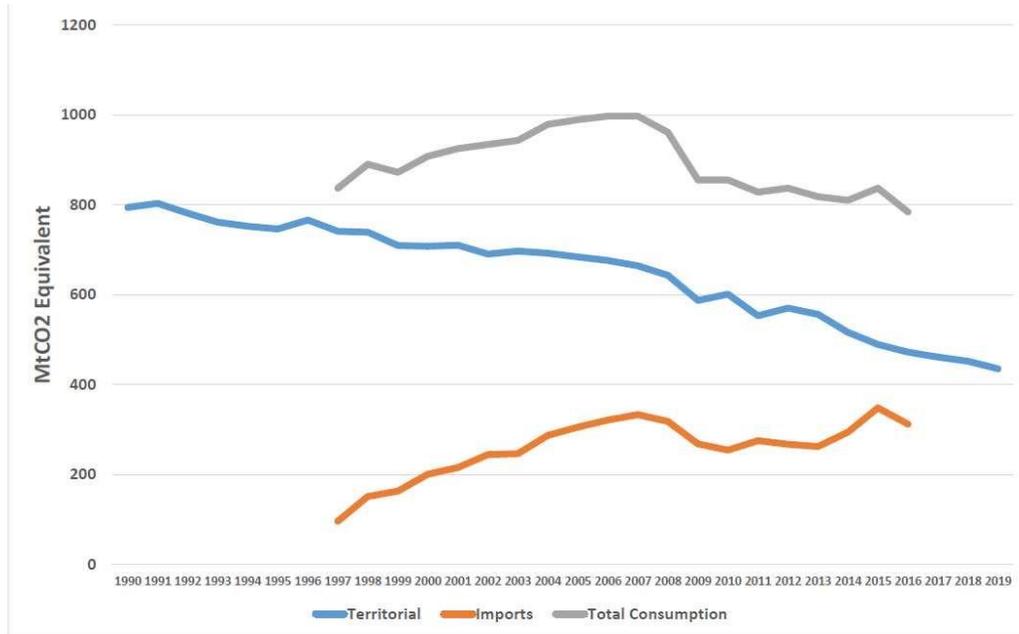


Fig.2 Emissions: Territorial & Consumption

Starting with the CCC statement from May 2019, it is evident that the CCC believes that by solely reducing emissions produced in the UK to zero we will have some kind of impact on rising mean global temperatures. This is a deeply concerning statement, as it suggests that the CCC is unaware of how global warming and climate change occurs. On a global scale the GHG emissions produced in the UK are very small and will have little effect on global average temperatures one way or another. Indeed, if it is morally acceptable to continue to ignore the GHG emissions created in, for example, China, for products consumed in the UK, then the easiest way for the UK to reach its 2050 target would be to offshore the remainder of the UK's manufacturing capability to such places! The problem with this philosophy, which we have now practised in the UK for several decades, is that we are shifting manufacturing and production from what is now a relatively low-emissions regime (due to closure of coal-fired power stations, for example) to a much higher-emissions regime in China, for example, which is still building new coal-fired power stations and financing new coal-fired power stations in other countries. The graph reproduced below as Fig.3 clearly demonstrates that over the past 30 years, the growth in global consumption of fossil fuels (coal, oil and natural gas) has been enormous, whereas the growth of low GHG-emitting technologies such as renewables and nuclear has been relatively tiny. This demonstrates the danger of believing that heavy reduction in the UK's GHG emissions will have very little impact on the global emissions, which are what matters for climate change mitigation.

While this may not be an intentional policy, the fact remains that unless and until we start accounting in the UK's statistics for the GHG emissions involved with product consumed in the UK but manufactured elsewhere, we are only misleading ourselves. However, the moral dilemma remains that if we factor these emissions back into the UK's statistics, the 2050 target becomes an ever-receding possibility. This does not suggest that there is anything wrong with the 2050 targets, per se, but that we cannot and must not claim that "we also end our contribution to the rising global temperatures". The fact is that we will continue to add to rising global temperatures because of the 'offshoring' policy.

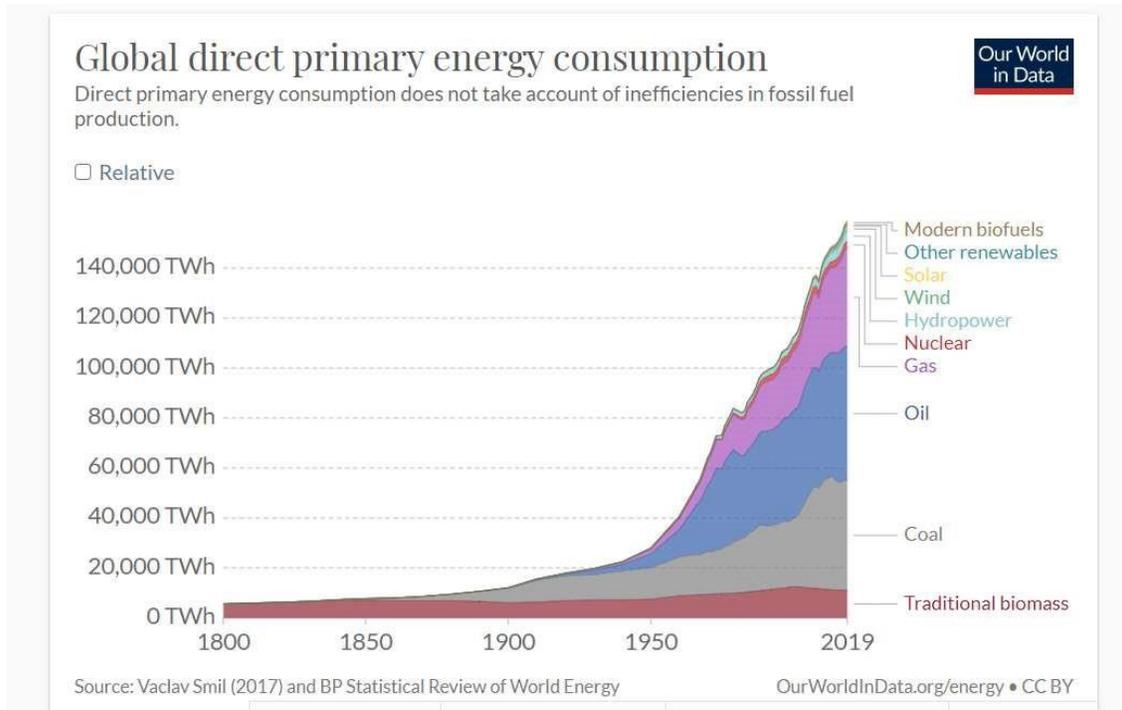


Fig.3 Global direct primary energy consumption 1800 - 2019

Regarding the Ten Point Plan of November 2020, a similar position is adopted, which claims that Britain is “leading the way”. The fact is that Britain has led the way only in offshoring manufacturing and production and has reaped the benefits without acknowledging the cost of doing so. The cost benefits of ‘offshoring’ are colossal and few people who are not in international trade have any concept of how large the savings can be from shifting manufacturing production to the Far East. Furthermore, this action has almost completely taken away the battles with the trade unions that so bedevilled UK industry in the 1980s and was, indeed, one of the main reasons for offshoring the product in the first place. To simply accept these cost benefits and crow about our “economic success” while completely ignoring our “environmental responsibility” for product manufactured elsewhere is morally indefensible.

Much the same can be said for the Energy White Paper of December 2020. There can be little doubt, as noted by Mackay and Helm a decade ago, that if we added back in the emissions from the other nations, resulting from their production for us, the figures would look very different and are likely to be no better, and possibly worse, than those of the rest of the G7 (see, again Fig.2). Similarly, the expression “the UK is decarbonising faster than any other G20 country since 2000” demonstrates the problem of having a focus on the unscientific concept of ‘decarbonisation’. The connection between so-called ‘decarbonisation’ and climate change mitigation is scientifically unsound and reduction of greenhouse gases, even to zero, solely within the confines of such a small country as the UK, can indeed lead to even greater rising average temperatures on a global scale.

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