Dear Candidate,

To meet the challenge of climate change the United Kingdom needs bold and urgent action.

Even as we get smarter in our individual energy use, moving to electric heating, trains and vehicles could double electricity demand by 2050, and all of this needs to be low carbon.

We must also protect our quality of life, guaranteeing affordable power for your constituents’ homes, businesses, schools and hospitals. This prompts big questions:

- Do we have the means to deliver Net Zero emissions quickly?
- Can we make sure our electricity supply is dependable?
- Can we create a boom in ‘green jobs’ to support employment as we phase out fossil fuels?

The answer is yes, but only if we act now. Renewables are growing, but weather-dependent wind and solar need a low-carbon backbone of stable energy, and only nuclear currently fits the bill.

Several smaller reactor designs are developing well and the UK leads the world in the development of fusion. Progress is also being made in battery storage and dealing with waste CO₂, but we need to make big decisions now on commercially available, proven technology or we will miss the mark.

Modern, large-scale, nuclear power stations are being built around the world today. They will capture their waste, pay for and store it safely and be overseen by national and international regulators and conventions. They can also be used to make hydrogen, a high-efficiency clean fuel that can be used for transportation, heating, and power generation in places where it is difficult to use electricity.

More than this, nuclear is an economic powerhouse, employing hundreds of thousands of people directly and in related industries. It offers transfer opportunities for the fossil fuel workforce and high-quality careers for young people across the country.

A new fleet means billions of pounds of inward investment and strong relationships with global trading partners who will be critical to the economy, whatever our future relationship with the EU.

What’s more, the price tag for nuclear power can be dramatically reduced with changes in financing methods. A commitment to a series of reactors would also cut construction costs and timescales.

But let’s be clear, all but one of our current fleet, which together provides nearly half of our clean electricity, are due to retire by 2030. We need to commission new plants to plug that gap and then grow the contribution of nuclear to reach net zero.

If all we do is finish the one plant currently being built here, we will not succeed.

We hope you will agree that by acting now, we can deliver a sustainable power system based on nuclear and renewable energy, and we call on you to pledge your support for this pathway to a 21st Century green economy.

Yours,

Professor Jim Al-Khalili OBE FRS FInstP, theoretical physicist, author and broadcaster
Professor Wade Allison, Emeritus Professor of Physics and Fellow of Keble College, University of Oxford
Dr. Jenifer Baxter, Environmentalist, Chartered Engineer and Scientist
Andy Berry, Principal, Bridgwater & Taunton College
Dr. Michael Bluck PhD, DIC, MI MechE, MIET, CEng, Director, Centre for Nuclear Engineering, Imperial College
Dr. Ben Britton, CEng, CSci, FI MMM, Senior Lecturer/RAEng Research Fellow, Imperial College London
Lindsay Broadwell, Councillor, Leicester City Council
Len McCluskey, General Secretary, Unite the Union
Mike Clancy, General Secretary, Prospect Union
John Clarke, President, Nuclear Institute
Malcolm Grimston, Honorary Senior Research Fellow, Centre for Energy Policy and Technology, Imperial College London
Kirsty Gogan, MSc, Co-founder and Executive Director of Energy for Humanity
Dame Sue Ion, BE FRS FREng FIMMM, Hon Pres of National Skills Academy for Nuclear
Dr. John Idris Jones, Chair of the Snowdonia Enterprise Zone and Chartered Physicist
Mark Lynas, author, journalist, environmental activist
Peter McIntosh, Chair, Trade Unions for Safe Nuclear Energy
Tim Roache, General Secretary, GMB Union
Professor Eugene Shwageraus, Senior Lecturer, Cambridge University Engineering Department
Professor Gerry Thomas, Professor of Molecular Pathology, Imperial College London
Nuclear Innovation and Research Advisory Board:
  - David Boath
  - Maggie Brown
  - Paul Brown
  - Professor M. Grace Burke
  - Professor Gregg Butler
  - Dr Manus O'Donnell
  - John Molyneux
  - Professor Tom Scott