Before I answer the questions, I would like to say that if elected I would be very keen to work closely with Low Carbon Oxford in tackling these issues. Through my normal day job I have led national campaigns on climate change in the recent past, and am extremely committed to making sure the urgent action needed is taken at a local, national and global level.

Thank you for giving me the opportunity to set out these answers. Apologies if they're too long...

Does your party accept the need to leave 80% of the world's known fossil fuels reserves in the ground? How does this affect your policies?

Ed Miliband - the energy and climate change secretary in the last government who negotiated a UN climate deal at Copenhagen –says that building a sustainable environment is 'the most important thing' he could do in politics. Within months of voting, there will be a vital UN climate summit in Paris, where Ed has promised to work for a binding global deal setting ambitious emissions targets to keep the temperature below 2C. As a consequence, this involves leaving most of fossil fuels reserves in the ground, unburned, at a faster pace, and setting a goal of net zero global emissions in the second half of the century. Domestically, Labour has committed to a carbon-free electricity supply by 2030. I am committed to leaving 80 per cent. of reserves in the ground, unburned, and support the fossil fuel divestment campaign which has this as its goal.

Does your party approve of fracking in England and do you support it in Oxfordshire?

I am a supporter of the Frack Free Promise set up by Greenpeace and Friends of the Earth and oppose all fracking in the constituency and Oxfordshire. As part of Labour's agenda for shifting power downwards and sideways, Ed Miliband has promised to devolve powers over fracking to Wales, where the Labour-run Government is steadfastly against fracking. Labour has said that there would be no fracking in Scotland without that Government's approval, and Scottish Labour promise that they would freeze fracking.

I was appalled to see the Coalition dash for gas, with their Infrastructure Bill providing for fracking under people's homes. As the opposition with too few votes to impose its will, Labour did the best that it could under the circumstances, successfully demanding mandatory Environmental Impact Assessments (EIA) for fracking operations, independent inspections of wells, and monitoring of fugitive methane emissions. While the Government accepted thirteen of Labour's changes in the Commons, they threw them out in the Lords, allowing for the Secretary of State to decide which groundwater and protected areas would be covered by the Bill and requiring planning authorities to consider the environmental impact of a development, not insist on an EIA. I was especially very concerned by the weakening of Labour's requirement that people must be notified about fracking in their area. The next chance to consider the matter falls after the election, when I hope we will have a Labour Government to tackle the dangers of fracking.

Should Oxford West and Abingdon become a Zero Carbon Community by 2050? If so, what would be your top three policies to achieve this?

I strongly support our constituency cutting carbon emissions to zero by 2050. I was disappointed that the County Council are unambitious, committing to cutting emissions by 50 per cent. by 2030.

While people living in Oxford commute more by sustainable transport (bus and rail accounts for 18.6%, walking for 16.8%, cycling for 17.1%) than by car (35.6%), most living outside of the city use a car to get to work (64.5%). Our unaffordable housing crisis is forcing people to live miles from work,

meaning transport accounts for 37% of total emissions in Oxfordshire. One focus would be working to increase access to affordable housing in the constituency.

I strongly back Osney Lock Hydro (OLH), the first community-owned hydro scheme in the county. It is impressive that OLH reached more than double their target investment of £250,000 in three weeks, showing that there is enthusiasm for community energy. I would work with and support those who wish to harness the power of the Thames and other renewable sources to power homes and save on carbon dioxide emissions.

With smart meter roll out planned nationally from 2015 to 2020, we should seize the opportunity to develop a 'smart grid' that allows for the balancing of electricity supply and demand in real time. In addition to providing accurate billing, smart meters, in producing smart grids, would help with yet further decarbonisation of the electricity system at low cost and encourage the connection of new types of electricity uses, which opens up innovation and local business opportunities.

How would you significantly reduce carbon emissions from transport and personal travel in Oxford West and Abingdon?

I have been disappointed by the County Council's moratorium on new cycling infrastructure projects. Were we to see a connected cycle network with clear road markings, better road surfaces, cycle signage, and a widely available, easily accessible cycling route map, I expect to see an increase in cycling take-up, so that we might overtake Cambridge as the UK's leading cycling city. A cycle lane along Botley Road would very much encourage more people to cycle into the city along that route, while making existing cyclists travelling along that road feel safer. Increasing cycling take-up promotes healthiness and lowers carbon emissions.

I welcome the City Council's Low Emissions Zone and the resulting reduction in pollution, and am pleased that local buses are complying with the most stringent emissions standards. I would like to see more cars and trucks emitting less, and would work to build a network-wide electricity vehicle charging infrastructure.

Do you think your party should have polices to improve the energy efficiency of 500,000 homes of the fuel poor a year to Band C on the EPC scale? If not, what level of ambition should you have? What policies would you introduce to achieve this and how will they be funded?

I strongly support initiatives that "power down", especially when they help to tackle fuel poverty locally, with lower household energy bills and protection from future energy price rises (although Labour's pledge to freeze energy bills is aimed to assist with this). The scheme run by Oxford City Council and the Low Carbon Hub in Barton to improve the energy efficiency of local homes could provide useful best-practice which could be used in Oxford West and Abingdon.

Existing policy for achieving energy efficiency in housing has focused on cost-effective cavity wall insulation and loft insulation, but we will only achieve longer-term and real success if we are bolder. The size and poor energy efficiency of housing needs ambitious renovation and adaptation of technologies such as insulation and renewable energy installations such as solar panels. I would like to spend more time as your MP working with community groups and experts, both local and national, to develop this ambition and the most appropriate and cost-effective policies.