

#### **East of England**

All Party Parliamentary Group

Co-Chairs Peter Aldous MP and Daniel Zeichner MP

Vice-Chairs Baroness Janet Cohen, Jonathan Djanogly MP, Matt Hancock MP, Lord

Alan Haselhurst, Rachel Hopkins MP, Lord Stewart Jackson, Gagan Mohindra MP, Priti Patel MP, Andrew Rosindell MP, Giles Watling MP

Moninara Wir, i Titi i atet Wir, Andrew Nosinaett Wir, att

Secretary Clive Lewis MP
Treasurer Dr Dan Poulter MP

The East of England's vital 'offer' to the UK as it progresses towards net zero and the region's 'asks' regarding adaptation to climate change

14:00 to 15:30 on Wednesday 6th December

#### **NON-VERBATIM MINUTES**

#### **WELCOME AND INTRODUCTIONS:**

- Peter Aldous MP, Co-Chair, East of England APPG
- Welcomed all attendees to the meeting and extended a special welcome to our guest speakers
- Drew the attention of attendees to the minutes of the last meeting <u>here</u> and follow up letter to Minister <u>here</u>.
- Explained that the purpose today is to look at two issues what the East of England has to offer the country in terms of its progress to net zero (which in brief is a lot and could be even more); and what support this region needs from central Government if it is to adapt to the unavoidable impacts of climate change eg flooding, drought and coastal erosion
- Referred to the excellent and very detailed brief that Asher Minns of the Tyndall Centre for Climate Research at UEA, kindly prepared. Explained that he will introduce the session by highlighting three or four of its main findings.
- Further explained that after our keynote speaker, Kerry McCarthy MP, we will pause for questions and then hear from our expert regional panel.
- Pointed out that the Minister for Energy Security and Net Zero, Graham Stuart MP, has given his apologies as he is at COP28. Said that as usual we will follow up the meeting with a letter to the Minister and then hope to secure a meeting with him.

#### **KEYNOTE SPEAKERS:**

- Asher Minns, Executive Director, Tyndall Centre for Climate Change Research, UEA
- Very important to note that the UK will not achieve its very important climate charge carbon targets without the East of England's contribution: renewables, offshore and possibly on land, as well as potentially biomass too: there are therefore considerable opportunities for jobs and skills in this region.
- The East of England is the most vulnerable region to climate change already dry and droughty, we have seen lots of coastal erosion and it is susceptible to flooding as well as heatwaves and fire. Its prime agriculture is therefore very vulnerable climate change.
- My first recommendation is that there should be an independent climate risk assessment of the East of England. Although some work is out there needs to be a quantitative analysis of the vulnerable areas with some thresholds for adaptation included. Given the region is growing and has serious housebuilding plans, this work is all the more important and indeed urgent.
- It's worth noting already London has thresholds hence Thames Barrier. It's time to set some for east of England

- Second, there has been insufficient investment in energy infrastructure. This limits the UK's move to green energy as well as causes problems in the East of England as it seeks to encourage electric vehicle use.
- Third, place based climate action is required as well as national activity. This on the ground activity should complement national frameworks. Check out Climate Change Commissions which help local authorities deliver

#### Kerry McCarthy MP, Shadow Minister for Energy Security and Net Zero

- Congratulated the Co-chair for his green credentials and remarked that her political career began in Luton, an area within the East of England.
- As we have read 20% of the region are below sea level and that could rise by a meter by the end of the century. Food supply could also be impacted. One third of all vegetables are grown here.
- At the heart of Labour's plans are clean energy by 2030 tripling solar and doubling of on shore wind generated electricity and quadrupling of off shore wind generated. These all provide challenges as well as opportunities
- Wetlands sequester carbon and help stop flooding so important to look at landscape to see how much could and should be given over to nature, to housing, to energy mix, what you grow and what it is for. The Government are set to launch a national land use framework and this will be of interest and importance to the East of England.
- The Greenport infrastructure has been identified as something that needs to be invested in and some of the committed £28billion green investment will be used for this as well as to set up GB Energy.
- New homes should be zero carbon and this was the Government's plan but this was dropped and since then 1 million houses have been built! This is not helpful given the existing need for and backlog in retrofitting.
- Finally, want to discuss place based action. Seems that, for example in coastal areas, action on climate change can help complement and add to the tourism economy. We want a strategy for the region but we also want all voices to be heard and for action to be owned locally.

#### **QUESTIONS:**

- A problem that increases to minimum wage has created is that more skilled work becomes less attractive as not sufficiently paid more. This can mean that environmental jobs that are needed are not being taken up
- Confidence for SMEs to push towards carbon neutrality is not helped by Government changing its five and ten year targets
- Eastern Powerhouse has asked for a specific energy policy for the region including skills
- Is it worth incentives encouraging energy saving modular housing being assembled at Freeports
- Scottish Power currently building 2rn largest offshore wind East Anglia 3 already run East Anglia 1 which serves 600,000 customers. Currently trying to decarbonise Felixstowe.
- Inflation Reduction Act we don't need to match what USA done, but we just need to move faster so that we make the most of existing investment and investors (windfarms take 13 years but only 2 years is construction).

#### **ANSWERS:**

- **Asher:** there are opportunities from the environment and important that skills are delivered. Could be helpful for social mobility. Agree reliable policy direction is really helpful as is regional policy. The modular housing campus idea is very interesting. Sad that new houses will in 10-20 years time be obsolete. There is a need for politicians to show leadership to explain why pylons on land are required now
- Kerry: modular housing very interesting. Very important for the public sector. Agree with previous speaker, the private sector will invest if there is a clear strategy which is not veered from. We recognise the issues with minimum wage and dis-incentivisation of jobs with more of a career structure. Therefore, Labour is looking at apprenticeship levy and repurposing it for use as a skills and growth levy which can be used for more short-term training. And Labour support regional strategies.

#### **EXPERT REGIONAL PANEL:**

## Laura Tuplin, Water Resources Strategy Programme Manager, Anglian Water

- I would start by making a plea regarding the help and consideration we need in order to have water for the future: we are one of the most rural and flattest areas of England and we have to pump of lot of our water and wastewater
- we're finding that our treatment processes are becoming increasingly complex and energy intensive so this
  makes us one of the most power hungry sectors in our region and it's becoming exacerbated by the climate
  change for example the recent drought in 2022 meant we had to pump more water around our region to
  ensure that our customers had a water supply
- we're quite conscious about our emissions and that's why we have an ambition to become a carbon neutral business at the heart of our Strategic Direction statement and why we are investing so we'll achieve Net Zero operational emissions by 2030
- we'll achieve that through a three-step hierarchy: of reducing emissions; decarbonizing our electricity supply and finally removing our offset and our emissions
- Anglian Water are currently constructing one of the biggest infrastructure projects the country has seen: a potable water pipeline that's taking surface water from North Lincolnshire and distributing it to areas throughout our region before finishing Colchester in Essex.
- Once complete the pipeline will be longer than any UK Motorway larger than our total construction program between 2015 and 2020. We recognized at the outset the importance of decarbonisation in the design and delivery process
- we're also planning for the short term and becoming more resilient to climate change so we've recently submitted our business plan price review 2024 and in it we recognize that we operate in a region where rigid material are prone to bursting in drought and extreme heat situations
- This is already resulting in supply interruptions to our customers and wasting water which is something we do not want so using a world leading climate modelling tool developed in partnership with recognized climate change experts we've been able to establish where these climate vulnerable mains are and we'll be investing £184 million between 2025 and 2030 to start replacing them and by 2060 we'll have replaced 75% of these climate vulnerable mains
- we're currently working with our regulators to promote the need for long-term planning and investment for Net Zero in our region. Consequently, we realize that the country's hydrogen ambitions as well as technologies such as nuclear will require significant amounts of water as part of their processes but to put it bluntly our water supplies are stretched already due to climate change and a growing population
- When developing green industry I'd like to encourage this APPG and the region to think systemically about water resource planning and the development of hydrogen and other low carbon Technologies as we do not want the lack of water to hinder economic growth or energy security for the country

## Phil McNaughton, Head of Decarbonisation, British Sugar

- British Sugar is at the heart of the UK beet sugar sector processing all of the UK homegrown sugar beet crop which is all growing on the Eastern side of the UK. We have four operating sites three of which are in East Anglia
- The sugar that we produce fulfils over half of the UK sugar demand and in order to secure that supply of raw material we work with over 2,300 growers across East England, East Midlands and Yorkshire our oldest Factory just near Norwich called Cantley is just over 110 years old
- our annual production of sugar is about 1.2 million tons which comes from the processing of 7 to 8 million tons of sugar beet
- we are looking to the future and innovating through continuous improvement. By building upon our position as a UK Agri Tech Pioneer we'll help decarbonise our operations and help the UK meet its 2050 Net Zero targets
- British Sugar has significant heat and also electricity energy demands and that's brought about by the fact that the raw material is predominantly water (sugar beet is about 3/4 water) and ultimately to produce a solid crystalline product all of that water needs to go through an evaporation and then crystallization process

- we've been working hard at reducing energy consumption and examining a number of Technologies and Pathways that we think can continue to reduce our emissions towards net zero targets
- first we are trying to protect and sustain our existing activity by investing in highly efficient combined heat and power plants
- we also operate what was the UK's first ground breaking bioethanol planter at Wissington site in Norfolk, and overall since 2018 we've reduced our carbon emissions by over 13% which might not sound a lot but that's required a lot of investment and also effort on the ground
- Our most recent project has been a 17 million pound project to improve the energy efficiency and reduce the carbon emissions of the Wissington site by about 30,000 tonnes each year
- in terms of future emissions and abatement activity we've identified some technologies that we think could support our operations to decarbonise. Everything is being looked at, including low carbon hydrogen, electrification and also small modular reactors
- we're also very conscious that there are some infrastructure challenges around getting both increased green electricity into the network in the east of England and also hydrogen flowing through pipelines
- Maintaining some of the support schemes such as the CHP quality assurance program is always going to be positive for us. An outline road map for the scaling up of the hydrogen value chain to enable rural regions to fuel switch would also be helpful.

## • Kate Grant, Director, East of England Network, Cadent

- Three key points: the first is around energy transition and needing to think of it as a social change project rather than just a technology solution: what's key is for us to bring everybody along with us particularly our customers
- Second, the gas industry has a very instrumental role to play in moving towards net zero for the UK economy.
- Third the production and supply of hydrogen within the east of England is a is a big opportunity for skills development and investment in the east of England.
- The Cadent gas Network connects around two million homes and businesses and around 80% of those property
  use gas for heating. This is important because when you look at the volume of energy that we transport
  through the gas network, when compared to the electricity network, on our peak demand days we are
  transporting around four times the energy levels.
- A just transition is what is right and accessible for our customers what is affordable for them. About two years ago Cadent were approached by the government to look at developing a demonstration project which would look at the practicalities of converting an area to hydrogen
- We offered local customers the opportunity to have all of their gas appliances checked free of charge and they would be given two options: either a free hydrogen ready boiler or a free heat pump
- A really key Insight from that that study was that the majority of the homeowners chose not to change at all so their preference was to neither have a new heat pump nor to have a hydrogen ready boiler. What they wanted was to retain their access to natural gas and not to have change forced upon them.
- That's why I made the point at the start around needing to think of this as a social change project
- Cadent invests around £100 million every year on its network effectively making it ready for the transmission of renewable gases for example the hydrogen that Scottish Power will be hopefully producing imminently in Felixstowe.
- It's not just about domestic customers in the east of England, we see quite a lot of commercial customers agricultural users, steel manufacturing, glass, bricks, fertilizers - so I really see an opportunity for hydrogen production and consumption
- Cadent has a vision for the East to be a hydrogen powerhouse producing hydrogen which powers two of our biggest cities: Capital hydrogen will serve greater London and hydrogen Bley will serve the West Midlands
- The implementation of projects such as this would see the creation of thousands of highly skilled well-paid jobs in the East and actually we would position ourselves as a regional if not national player in the hydrogen economy

## Steve Beel, Chief Executive, Freeport East

- the East of England is a globally recognized clean energy Powerhouse even if the department for business and trade website doesn't always position it in that way
- we've got great global connectivity, we've got innovation assets in abundance Cambridge is obviously talked about a lot but actually lots of our universities have real specialisms that are relevant to Net Zero um
- we have a genuine local stakeholder passion for net zero it plays out in our local politics and in our local councils. Freeport East reflects and takes forward this agenda.
- Offshore wind is the key driver of the further decarbonization of the UK's power system. The industry has been crying out for more port capacity for decades and it's a massive bottleneck which creates inefficiencies and drives up costs
- This is disabling our ability to deliver for floating offshore wind which is the next generation beyond the fixed bottom offshore wind. Renewables UK have estimated we need £4 billion of investment and we're nowhere near that.
- One key project at Freeport East is one called Bathside Bay which is a proposed offshore wind and clean fuels port this is unique in terms of its depth of water and acreage.
- It's got private investment so it is ready to go in terms of the existing land owners and Port operators at Harwich. The Free Port is also committed to putting in some of our own funding capital funding into the project
- It's also a project that would deliver more for levelling up in Tendring than almost any other intervention the government are currently funding.
- Hopefully the planning applications will be consented in the Spring which again would be unique in UK where many port projects are mired in planning issues for some years
- We really do now need the government "coming to the party" in terms of their own support.
- Transport decarbonization is very important and nothing should take away from the need to get Ely Junction delivered but we should also recognise we have thousands of trucks every day coming out of Felixstowe so this is a really key node for the UK in terms of driving transport decarbonization
- National Grid has identified the east of England as one of the best places to develop green hydrogen and the region therefore offers a crucible for helping the UK deliver freight decarbonization
- we're currently undertaking a piece of work with the Renewable Energy Association to look at the increasing power demands in our immediate region and what that means for grid connectivity and flexibility as well as new renewable capacity. This will be launched in the new year and APPG members are invited to attend.
- the east of England also has an opportunity to help secure local supply chains for clean energy technologies:
   the Freeport in conjunction with local universities and their R&D Innovation capacity presents a real opportunity to grasp more
- we recognize the need to level up other parts of the country but we certainly get some investors from overseas telling us that being shown other parts of the country that don't match what they need and actually they really want to be in the east of England

# • Cllr Tracey Wye, Member of EELGA Regional Climate Change Forum and Executive Member for Sustainability and Climate Resilience at Central Bedfordshire Council

- we share a determination to embrace the opportunities that come with adapting to new climatic conditions while urgently working to reduce carbon emissions and restore nature so we want to lean into the challenge by innovating and promoting sustainable practices
- many people are scared about climate change or worse they're in denial but local authorities, by embracing net zero solutions, means we can imagine a future where everything will turn out okay
- local authorities are already major players in the move to net zero but with the right government support we could do so much more. There are so four areas where increased support will accelerate action to tackle and adapt to what's coming
- firstly, we would ask Westminster to not only provide more funding but to simplify the funding landscape so
  councils won't need to compete against each other for money or waste time working on bids that go nowhere:
  our officers need to be focused on implementing change rather than engaging in fruitless and costly
  applications for financial support

- secondly, government could strengthen planning policy so local authorities have some real teeth to ensure new homes are built to high sustainability standards for construction. Councils want to ensure developers construct future proofed homes and provide new green infrastructure such as solar panels on roofs as well as save our fields for nature restoration, rewilding public open spaces and agriculture and with the right funding we'll work with the current occupants of older properties to bring about effective retrofitting that will not only reduce the energy needs but also create new highly regarded jobs
- thirdly we have an excellent opportunity with our extensive agricultural network to work with the farmers to improve our soils sequestration of carbon and provide food security east of England
- last but not least, with some serious investment from Westminster and the regional collaboration that is going on, councils can develop reliable and frequent public transport that connects our rural areas as well as our towns as it's vital we reduce carbon emissions associated with moving people and things from A to B. This would also create safe active travel networks and together these will reduce reliance on private car ownership
- when our regional MPs take these points to their colleagues in Westminster they can proudly act as climate ambassadors giving hope and raising expectations especially for our younger generations. With the right support and with government strengthening national climate policies the east of England's local authorities can accelerate innovation, strengthen sustainable practice and policies and inspire our nation to believe in a nature rich, carbon neutral, future that promises to keep the fun and convenience we currently enjoy.

#### **QUESTIONS AND CONTRIBUTIONS:**

- we heard two particular challenges regarding hydrogen: it is water intensive and so that is something that we need to address; and also the government approach to hydrogen has been a cluster focused policy but, given the nature of the east of England where our industry and our populations are dispersed, does there need to be a change in the government's focus?
- the number of initiatives that are going on across this area is actually quite overwhelming and I think this concept of climate ambassadors is a really good one
- do the panel think that we need a Grand Vision for the east of England because there could be a grand net zero biodiversity plan of action and we could be leading the world
- without putting Kerry on the spot I just wanted to request that she possibly meets Freeport East or even visits this lovely place in Essex called Harwich. (Kerry said yes but in the Spring)

## **ANSWERS**

- The focus on Industrial clusters is because they will be heavy hydrogen users and therefore to do so reduces startup costs. It's actually the same for electricity production whether that's low carbon wind production or hydrogen production. Cadent adds value through its networks linking demand centres to points of production
- collaboration and coordination across an east of England strategy would serve us well if it could connect what we need to do from an energy and decarbonisation perspective to how that fits into water scarcity and biodiversity
- regarding climate ambassadors, we need to change human behaviour and to eliminate the fear factor of what's coming and embrace it as an opportunity. Post covid I think government would be in a great position to actually lead that message but local government is also really well placed to do this in collaboration with local climate change commissions.
- there is an issue with encouraging young people, at an early enough age, to look at the opportunities that will
  exist from climate change and the skills which will be required. Possibly there could be more schools and careers
  advice could do

#### MAIN 'TAKEAWAY' MESSAGE FROM THE SESSION TODAY:

- Laura: I take from the session as highlighted by Asher, the country cannot achieve its decarbonization targets without the east of England and we are concerned about water availability not being taken into account early enough in the development and planning processes. The solutions that we have take a long time to develop and construct and Anglian Water wish to work with developers, government and regulators to promote the systemic thinking, the long-term planning and investment needed to get to Net Zero
- **Phil**: I think just two points first, there are a number of different technologies that we'll need to explore from a decarbonisation perspective to see how they can fit into the east of England's trajectory; and second, sound and consist policy at the national level will be very helpful and beneficial to everyone moving forward.
- Kate: we need to think about energy transition from a whole system social change point of view ie look more at what's the human impact; and we need to make use of existing infrastructure in order for this to be a just transition, an affordable solution for our customers. I also believe that hydrogen production and transportation in the east of England is a fantastic opportunity to develop skills and investment in the region.
- **Tracy**: when you write to the Minister with what we've heard today maybe you can just add a little note from me saying he's more than welcome to come to Central Bedfordshire. The other item I would highlight is the role of the climate ambassadors because as you have highlighted often local communities think Net Zero means things being done to them without them having an opportunity to shape that and I think climate ambassadors have a real role to play in addressing in alleviating those concerns.

#### **NEXT STEPS**

- Peter Aldous MP, Co-chair, informed all attendees that a letter would be written to the Minister based on the excellent contributions made this afternoon
- He thanked speakers, attendees, sponsors of the Group and the Secretariat
- Finally, he let attendees know that the next meeting also on line will focus on Levelling Up Health Inequalities and be on Tuesday 23<sup>rd</sup> January 2024 from 3 to 430pm. Steve will be sending an invitation to register next week

The East of England APPG is kindly supported by British Sugar, London Stansted Airport, the East of England LGA, AstraZeneca, Anglian Water, Cadent, Transport East, the UK Innovation Corridor, Freeport East, England's Economic Heartland and CityFibre.























The academic partners of the East of England APPG are the Centre for Public and Policy Engagement at the University of Essex, The University of Cambridge, Anglia Ruskin University and the University of East Anglia.









## ATTENDEES (OTHER THAN SPEAKERS AND CO-CHAIR)

Will Elliott	Office of Daisy Cooper MP
Jackie Sadek	Chair, UK Innovation Corridor
Olivia Seccombe	British Sugar
Emma Green	British Sugar
Arnie Craven	Cadent
Matt Stewart	EELGA
Lydia Dareheath	Anglian Water
Saskia Hervey	UEA
Simon Chubb	Anglian Ruskin University
Professor Aled Jones	ARU
James Palmer	Eastern Powerhouse
Ivan Henderson	Essex County Council
Nicolette Jeffreys	New Anglia LEP
Prashant Shah	o2h
Rob Bush	EEEGR
Simon Markall	Scottish Power
Anne Bailey	Form the future
Richard Holdaway	СВІ
Richard Gapper	FSB
Stephen Mooring	Central Bedfordshire Council
Tony Houghton	Keystone Law
John Grant	Nine Tiles
Esther Blaine	Historic England
Michael Chapman	Suffolk Chamber of Commerce
Constance Anker	Cambridgeshire & Peterborough Combined Authority
Kevin Fenning	MetroDynamics
Steve Barwick	Secretariat for the East of England APPG