HOUSE OF COMMONS

Energy Security and Net Zero Committee

Oral evidence: Managing the future of UK oil and gas, HC 231

Wednesday 1 July 2026 Aberdeen

Ordered by the House of Commons to be published on 1 July 2026.

Watch the meeting

Members present: Bill Esterson (Chair); Sir Christopher Chope; Torcuil Crichton; Graeme Downie; Mike Reader.

Questions 114 - 193

Witnesses

I: Russell Borthwick, Chief Executive, Aberdeen & Grampian Chamber of Commerce; Richard Hardy, National Secretary for Scotland and Ireland, Prospect; and Donna Hutchison, Chief Executive Officer, Aberdeen Cyrenians.

II: Michael Love, Director of Skills Policy, OPITO Ltd; Dr Susan Grant, Strategic Lead, Energy Transitions, North East Scotland College; and Professor Paul de Leeuw, Director, Energy Transition Institute, Robert Gordon University.

Written evidence from witnesses:

– Aberdeen & Grampian Chamber of Commerce

– Aberdeen Cyrenians

– OPITO Ltd

Examination of witnesses

Witnesses: Russell Borthwick, Richard Hardy and Donna Hutchison.

Q114 **Chair:** Welcome to this afternoon's session of the Energy Security and Net Zero Committee. We are at Robert Gordon University in Aberdeen this afternoon for our session on managing the future of UK oil and gas, and a big thank you to our hosts for putting us up today. I will ask our first panel to introduce themselves, starting with Russell.

Russell Borthwick: Good afternoon. I am Russell Borthwick, chief executive at Aberdeen and Grampian Chamber of Commerce. We represent 1,400 companies doing business in the region, collectively employing about 100,000 people.

About 30% of those companies operate directly in oil, gas and other energy-related technologies, but therefore 70% do not. Our interest is very much as a place-based organisation. Getting the future of our energy system right or wrong will have a significant impact on our members and on the regional economy.

Richard Hardy: I am Richard Hardy, and my day job is national secretary of the Prospect trade union, representing 16,000 workers across Scotland. I am also a member of the general council of the STUC, representing 650,000 workers across Scotland.

Donna Hutchison: Good afternoon. My name is Donna Hutchison. I am chief executive of Aberdeen Cyrenians, which is a charity located in the city centre of Aberdeen. Since 1968, our ambition has been to reduce homelessness and hospital admissions through a public health approach, but also wider societal challenges, including the impact of the economic transition that the city is seeing.

Q115 **Chair:** Thank you all very much for joining us, and we look forward to hearing your evidence.

Richard, can you tell us how dependent the economy of Aberdeen is on the oil and gas sector?

Richard Hardy: I am going to widen that out, if I may, and talk more widely about Scotland, which fits more with my role as a Prospect and STUC officer.

Over the last 25 years, Scotland has seen a loss of almost half of its industrial jobs, and we are seeing that happen again in Aberdeen and Aberdeenshire. As I am sure other colleagues will speak about with more knowledge, this is not just an Aberdeen issue. It impacts communities right across Scotland and further into the UK. Jobs here, particularly for Prospect members. Our main membership in the offshore oil and gas sector is in aviation, the engineers and pilots who maintain or fly the helicopters that do crew transfers or air-sea rescue. Those people do not necessarily live in Aberdeenshire or Aberdeen; they are stretched across the whole of the country.

While I understand why we are here—and while this is the epicentre of the problem—this is a much wider issue across the UK than just Aberdeen. The key for us is that there is nothing that we can see coming down the pipeline that replaces the tens of thousands of jobs that have been lost over the last 25 years, and as we move through the day, I am sure we will get into some of the statistics around what investment creates in relation to those jobs.

Q116 **Chair:** Thank you very much. Russell, I will turn to you next. Can you describe the impact that you have seen and experienced over the last decade while oil and gas production has fallen?

Russell Borthwick: I am very happy to talk more centrally about this part of Scotland, which is heavily dependent on what has been the oil and gas sector, and which is trying its best to become a wider and more broad-based energy sector. As I said, however, 70% of our members are not operating in that sphere. Our data point here is something called the quarterly economic survey, which is run by British Chambers of Commerce every three months, funnily enough. It looks at about 5,000 largely SMEs across the UK and their prospects for the next three months and 12 months across a range of confidence and intention indicators.

When I came home to Aberdeen from the north-east of England 10 years ago, despite a cyclical downturn at that point in oil price and oil and gas activity, the businesses in this Chamber, the wider business community was still top quartile, top 10% against its peers across the UK, and these are not oil and gas companies. These are professional services firms; they are lawyers, accountants, retailers, hoteliers, transport providers, builders and architects.

Right now, this feels like more than a cyclical change; it is a structural change. In the last few surveys we are seeing the Aberdeen data lodged firmly at the bottom of the UK league table, with significant differences in current performance, in projected future performance, on the likelihood to shed workforce and on the lack of likelihood to invest, because of the conditions they are facing. This is something that is born from energy policy, but it is being felt much more widely across the business community.

We are making good progress with our diversification agenda in the four growth sectors, but it does not matter how good a job we make of that, as we are never going to replace the economic value for this region, for Scotland and for the UK if we get the transition wrong, and it feels like we are getting it wrong at the moment.

Q117 **Chair:** If the support for oil and gas were to change—and we will get into the detail of what the sector and, I think it is fair to say, the much wider economy is looking for, and what that might mean, in the next couple of hours—how long do you think the oil and gas industry could support the economy in Aberdeen, in Aberdeenshire and perhaps across Scotland?

Russell Borthwick: I think for a long time. Even if we just look at oil and gas in isolation for a moment, the Committee for Climate Change is clear that over the next 25 years, as we move towards a position of net zero, the UK will still have a significant requirement for oil and gas as part of its energy mix. It is something that we hear politicians from all parties saying.

The problem at the moment is that it is increasingly being supplied by imports, some from Norway, but that will continue to decrease as their production decreases, so we will be looking to import more of our requirement from LNG sources, from America, which is often fracked gas, and from Qatar, which is being transported halfway around the world.

I think the opportunity is straightforward. This is an industry that does not require any subvention or any intervention. I simply say that a tweak to current tax policy and a move to the already announced oil and gas price mechanism would instantly unlock £17 billion of investment in the UK, generating jobs and tax revenues, would increase our energy security and would give the Treasury more scope to decide what it wants to spend that income on, whether that be supporting households with bills, defence spending or anything of the Government’s choice.

At the moment, we are not seeing that because we are spending £60 billion a year on importing fuel, oil and gas, which does not pay a penny of UK tax, supports no UK jobs and brings no investment, while being worse for the global climate. That is what we are saying now. The opportunity is no subvention required, nothing like that, just simple tweaks to narrative, to OGPM being brought forward, and to a more pragmatic approach to North Sea licensing, where it can be demonstrated that the economic value is there and that it is actually cleaner, on environmental grounds, to produce it than it is to import the equivalent. That is what we believe the opportunity for the UK is right now.

Q118 **Graeme Downie:** Russell and Richard, you both spoke about the need to broaden the conversation, beyond Aberdeen but also beyond oil and gas. I want to talk a little about the low-carbon economy in and around Aberdeen and the rest of Scotland.

Richard, I will probably come to you first. How important is oil and gas, and continued confidence in oil and gas, in Scotland to encouraging people into the low-carbon economy? What role does that play in the industry at the moment?

Richard Hardy: I think the ongoing opportunity to be employed in oil and gas through the transition is absolutely vital. Look at the number of jobs per £1 million of turnover. For oil and gas, it is 14.2 jobs for every £1 million of turnover. For offshore wind it is 1.7 jobs; for onshore wind it is 1.5 jobs. Until we have a change of direction on manufacturing and actually using low-carbon generation as a way of recreating a manufacturing base, if you simply take oil and gas out of that equation, you are going to be facing a shortfall of a substantial number of jobs.

As a union we fully support a changeover from high-carbon generation to low-carbon generation, but if we make that a cliff edge, if we turn it into how we have dealt with previous industrial change—the closure of mines, the ending of shipbuilding and the ending of steel production at Ravenscraig—you will have a substantial issue with joblessness. At the moment, I think that the ability and the stability that oil and gas provides in giving some certainty while people decide where they are going to reposition themselves in the economy is vital.

We have seen some false starts. ScottishPower and the Scottish Government went out and employed a load of new people in network resilience. They encouraged some people to leave the oil and gas industry—"Come and work for us. We are not going to send you offshore"—and then, seven months later, they were making those same people redundant, having promised them that they would not go through the cyclical issue that oil and gas faces.

If you take it away, it is a disaster. It is better if you move through a process of repositioning, while retaining that ability and that certainty for workers—that is what our members are telling us; what we need is the ability to pay the mortgage and make ends meet—while we go through a process to come out of the other side, when it is clear what the Governments involved here have done in terms of an industrial strategy for low-carbon and renewable energy creation.

Q119 **Graeme Downie:** Russell, when it comes to the supply chain jobs that exist around Aberdeenshire, how much can be transferred or evolved into low-carbon jobs, and what support is available?

Russell Borthwick: The skills are highly transferable and there are a lot of very good reports. You will hear some from Professor Paul de Leeuw later, from the Energy Institute here at RGU, which tracks the levels of transferability of skills between current jobs and new jobs, and those levels are significantly high. The issue right now is that those new jobs do not exist yet, and I will borrow some STUC figures to quote back at you.

In the last 10 years, low-carbon jobs in Scotland have grown only from 23,000 to around 35,000, and it has now plateaued at that number. In the meantime, similar reports from the Jobs Foundation and Robert Gordon University are saying that traditional jobs are being lost at the rate of a Grangemouth per fortnight. That is 400 traditional jobs being lost on average per fortnight, but it is happening quietly in pockets of 10, 15 or 20, and many of those businesses are not making a fanfare about that.

They are simply doing it because their business operations are not supported because there is not sufficient work in what they used to do, that is the old North Sea, and insufficient new work coming on stream to redeploy those workers. They are either losing jobs, or increasingly we are seeing that world-class supply chain, which has been built up here and which has been coveted by energy regions around the world for five decades, is now being enticed to take its best people, resources and equipment to work on projects, whether they be oil and gas projects or new energy projects, in other parts of the world. That means they are not here.

When we get to the point of accelerating our clean energy ambitions and looking to build out grid and offshore wind projects and potentially carbon capture and storage and other things, we will be scratching our heads and saying that there is no one left in the UK to do it.

Q120 **Graeme Downie:** Donna, can you pick up some of those points from your own experience on the ground in Aberdeen? How are those kinds of low-carbon jobs viewed on the ground? How important is the oil and gas sector for some of the work that you are trying to do to sustain the communities?

Donna Hutchison: It is important that the transition is already impacting households; it is not a future risk. What we are seeing is economic transition in the north-east translating into income instability, housing insecurity and pressure on health and support systems. What people on the ground are seeing is a promise of new jobs, but they are not there now. The gap between what has come before and what is coming in the future, and that is where we are starting to see that harm. I think some of the employment data that is being used is masking that real economic harm. We are seeing people affected daily, people who have now been out of work for a number of months.

Q121 **Graeme Downie:** Do they just not believe that those new jobs are coming? Is that contributing?

Donna Hutchison: That is part of it. I think what has been interesting in some of the feedback we have had from students who have gone to do these degrees and are now concerned that the jobs are not there yet and what that is going to mean for them. I think there is probably a bit of dispiriting going on, that these jobs are coming but when? There is no hard line on the ground on when that is actually going to happen.

Q122 **Graeme Downie:** Finally, Richard, talking about the differences between low-carbon economy jobs and oil and gas jobs from a union perspective, how different do those two jobs look when it comes to terms and conditions and how do we get one to match up and meet the other a bit better?

Richard Hardy: If you are talking about onshore and offshore wind, terms and conditions and, importantly from our perspective, the safety results do not compare with oil and gas. I think there is an acceptance within most of the trade union movement that there is a premium to living on a floating platform in the North Sea.

These are not unionised organisations, by and large. Many of them are unionised in their home countries, but they are not unionised in the UK. For us, the big ask is conditionality. One of our big asks when we finally get to meet Great British Energy will be around conditionality and making sure that trade unions can be part of the creation of those new roles.

I want to pick up on Russell's figures. The 35,000 low-carbon energy jobs include 4,400 workers in nuclear in Scotland. We are not having a conversation about growing that workforce in Scotland at the moment. That is another decline to add on top of the decline that we are already seeing in oil and gas.

Graeme Downie: Yes, that is probably for another inquiry, because I would actually happily pick that up with you. Thank you.

Q123 **Torcuil Crichton:** I want to talk about the human impact with you, Donna, but I have two quick pick-ups on what Russell and Richard said.

Russell, you spoke about the supply chain going away, and we will not be able to recreate it if the skills are not there. Should we be seeing the North Sea supply chain as a question of national security rather than just jobs?

Russell Borthwick: I think that is a really strong point, and I think we should. The way we are considering defence right now, I guess we should really be looking at our energy security as a matter of national security, and having the businesses, the people, the resources and the equipment here to keep the lights on, to keep our hospitals and schools running, and to keep our supply chains moving to where they need to be as we transition.

I think it is important that a transition is defined as a change of state over time. There is no one who you will speak to in this region who does not believe that we are heading in the right direction. What we are asking for is a sat-nav reset. There have been some blockages on the original route, and what we are seeing as we look to other countries is that they are taking a more pragmatic view on what is happening globally and to their own economy and energy security. I think we should look at it in exactly those terms.

For many years, the supply chain has been fully employed in the North Sea. Some of them have chosen, almost as a cherry on top, to export those talents, but that has been an add-on. Right now, it has become a necessity. The further removed they become, the question is, do companies start to no longer be headquartered in Scotland? Do they come back at all? They do not have sight of work right now, and if you were running a so-called supply chain business, you would need certainty for your people and for your future order book. It is not here.

Q124 **Torcuil Crichton:** Time is short, so very quickly, Richard. You touched on nuclear, and we hear anecdotally that people leaving North Sea jobs, very complex engineering challenges, move into renewables and find that the challenge is not there, so they go straight into nuclear. Are you seeing that?

Richard Hardy: Honestly, no. What we see is some cyclical movement back into nuclear decommissioning from offshore. People who perhaps went through an apprenticeship at Dounreay and then went into the

North Sea, are coming back. Some of those people are moving into work at Beatrice, but some people are moving back into nuclear decommissioning.

The recent failure of a lot of the big engineering companies to make investment decisions around network renewal has meant that a lot of the people who had left, who were working offshore, had come back onshore with the promise of, "It is slightly less money, but we won't send you out into the North Sea for two weeks and, by the way, you will not have to put up with cyclical redundancies". But then they have been caught by cyclical redundancy. There are a lot of people who are rather jaded with this.

Q125 **Torcuil Crichton:** There is a lot of stress and anxiety. You talked about issues with joblessness. GMB talked last week about a cliff edge coming up here, and this is a real mental health and financial crisis coming into Aberdeen as well, isn't it?

Donna Hutchison: It is not coming; it is here. Evidence from Aberdeen shows that the transition is already having a material impact on households—not just jobs, but on households. Headline indicators would suggest resilience, but the underlying reality is one of financial fragility, rising demand, persistent pressures and widening inequality.

For us, a just transition means people remaining secure in their income, their housing and their health as change happens. Too often, this is being framed as jobs alone. What we are seeing on the ground is that transition is affecting whole households. Housing, health and economic participation are completely interdependent, and if one is disrupted, the others quickly follow.

If we do not address those together, we will see the same pressures cycle through the system, whether that be in Aberdeen or any other part of the country. We know from past industrial transitions that impacts—poverty, poor health, long-term inequality—can persist for decades. We are seeing demand for support rising. The early warning signals are there.

The third sector is the early warning system. From our perspective, service demand acts as a fairly early indicator of economic stress and it is faster than official labour market data will tell you. We are seeing rising demand across housing, crisis support and financial assistance. That is also consistent with local authority data that is being shared, and those long-term intergenerational risks are already present. We are seeing people becoming entrenched in inequality and long-term disadvantage.

One thing that is really important is that Aberdeen has always had levels of deprivation. A third of the areas in the city are the most deprived, a third are the least deprived. We have a two-tier economy in the city, and for us it has always been about that wealth gap, the pressures and the widening of that wealth gap.

Q126 **Torcuil Crichton:** Just two more questions, because you mentioned young people and their uncertainty going into this sphere. We have men aged 45 to 60, a really vulnerable group for suicide and mental health crises, and the domestic side of that, of course, is that these men's partners are literally single-parent families because they are offshore. It is affecting everyone.

Donna Hutchison: Absolutely. The reality is that we will see increases in child poverty, gender-based violence and substance-related harm. That is unintended, but foreseeable. We have seen that in post-industrial areas. In terms of the demographics you are speaking about, the core client base that we support is single, male and aged 18 to 45. Within that economic activity piece, that is widening.

We are also seeing people who have never been affected before being affected by this situation. People who have been in work for 20 or 25 years are now out of work and have no concept of how to access—

Torcuil Crichton: Because they lose who they are. They lose their identity.

Donna Hutchison: Yes. I think we have provided information to the Committee on a new project we set up recently, NorthBridge. That was a third-sector response supported by the private sector. It is a specific service to react to what we are seeing, which is that purpose, identity, loss of status and the impact on mental health that is happening.

Q127 **Torcuil Crichton:** You anticipate my last question, because we have been here before in the mining communities—

Donna Hutchison: We have been here.

Torcuil Crichton: —in Scotland and in England. What do you need? What does Aberdeen need and what does Scotland need to avert that?

Donna Hutchison: Sheffield Hallam University's Centre for Regional Economic and Social Research and the Coalfields Regeneration Trust have a great report, "The State of the Coalfields: Scottish Coalfields", and it is the playbook for where we will go.

What do we need? I think we need to be listened to. At the moment, one of the overwhelming feelings in Aberdeen is that this is being done to Aberdeen, not with Aberdeen. There is a lot of anger and frustration. We are currently supporting people who are losing their homes. My team's job is to make sure they do not become homeless. People are looking to access benefit systems that they have paid into. There is a stigma about that.

Some people are not claiming, so benefit claimant data is not reliable. What I would be asking for is engagement with the third sector. We are always the ones who pick up the response, we are the ones that pick up the pieces and at no point have we been engaged in this conversation.

I have to say in fairness that the Chamber of Commerce, OEUK and GB Energy all engage with us on what we can do, but I would like to see more of that, both at UK and Scottish Government level.

Q128 **Torcuil Crichton:** Richard, in terms of the workforce going abroad, do they stay abroad? Do they come home? Does the wealth stay here? When people go to work offshore, do they still come home to Aberdeen or come home to Scotland? Or do we see that workforce exporting itself?

Richard Hardy: I will just follow up on Donna's point. What will happen in Aberdeen is not a shock. It should not be a shock to anybody.

It has happened next door and partly in Graeme's constituency, where I live. I come from a pit village, where the cliff edge happened, and it has never recovered from 1986, with poor educational performance and high rates of substance abuse. None of us should want to wish that on anywhere.

The answer is more support for Donna and the work that she does but, actually, the real answer is, "Can we have some jobs, please?" With a job, you have the work that comes with it and the self-esteem. We need an industrial strategy that delivers jobs to counteract this view that these jobs are so far over the horizon—the low-carbon renewable jobs that have been promised and promised and promised by politicians. This feeling of things being done to people massively increases the alienation of people from politics and civic society. That creates substantial issues in its own right.

Once people go abroad, the wealth stays abroad. When our pilot and engineering members leave, because they are no longer needed for crew transfers, those skills will be deployable all around the world at a premium. They are not going to come back to Scotland when we realise that we need those skills to support further and further offshore wind development.

As part of the just transition, when I was on the Commission, we did a meeting at Forth Valley College in Falkirk. Of all those apprentices, some of whom were being put through work by INEOS at Grangemouth, one of the nine apprentices we sat in a room with was staying in Scotland. That was an older Polish guy who had come to Scotland and had gone through a late apprenticeship. The other eight, all under 20, had jobs lined up in Saudi, in Texas, in Australia.

Torcuil Crichton: Going and not coming back.

Richard Hardy: Much as I love Scotland, if I had gone to Australia at the age of 18 or 19, I am probably not coming back.

Donna Hutchison: We are also seeing the flipside. First, not everybody has the luxury of being able to work overseas. We are seeing people who have had job opportunities in restructure, but it has involved them in being 50% overseas, and family circumstance does not allow that. We are also seeing older workers, particularly in drilling, coming back from working overseas for the last 20 or 30 years, not aware of what the system is. We have one live case just now. That individual has come back, is now in temporary accommodation and cannot access benefits because he does not pass the habitual residence test and is now in a loop, which is of course costing the state.

You asked about what I need. I need systems that are designed around people and not sectors. These are real people, real-life households, real-life transitions, and we really need to think about the people—not just the jobs but the households; and about the people, not just the sectors.

Q129 **Torcuil Crichton:** Russell, quickly, Donna talked about two Aberdeens—one in quite deep poverty—but Aberdeen and Aberdeenshire have some of the wealthiest postcodes in the UK. Are we just seeing a real-life adjustment here? We have been here before. I remember coming to Aberdeen and seeing a bumper sticker, "Please God, give us one oil boom".

Russell Borthwick: Sadly, you might have seen that, yes.

Torcuil Crichton: Did Aberdeen itself do enough to prepare for this?

Russell Borthwick: I don't think until 10 years ago it did, and to be fair, I was away from Aberdeen in the north-east of England, interestingly. It feels like the weight of the world is on my shoulders sometimes. I actually spent 25 years in the north-east of England from 1994 and found a place that was still trying to come to terms with industrial decline, with how it replaced shipbuilding, coal mining and heavy manufacturing, which it had lost, and we ended up becoming quite involved in that.

Coming back to Aberdeen, we were pretty keen not to avoid thinking about it, and you talked about coal mining. I can see that some of the jeopardy and potential outcomes are the same as what happened to mining communities, but this does not have to be the case here. Aberdeen can be at the heart of driving the UK's new clean energy system.

We have the skills, the engineers, the people, the companies who can do that, but what is happening at the moment is the gap that we are talking about here between old energy technologies and new energy technologies is big, and we are not closing that fast enough. Policy, not geology, is creating that problem.

The UK and the Climate Change Committee say that we need 15 billion barrels of fossil fuel between now and 2050, and we can still achieve net zero. That is factored into the calculations. Right now, only about a quarter of that will come from domestic sources. We are importing three quarters of what we require, and the question we have is if we were to move the dial, the North Sea is probably capable of delivering half of what we need, not all of it. The economic impact, the jobs impact and the social impact would be significant. Our energy security would be secured, and actually it is better for global emissions.

Q130 **Torcuil Crichton:** And what you are all saying is that there is a human value to that, as well as an economic value.

Russell Borthwick: Both, and they come together.

Q131 **Mike Reader:** In our previous evidence session, we heard a compelling argument to maintain current levels to sustain the workforce long-term in the North Sea. Evidence from other countries where there are much more favourable regulatory and fiscal regimes—America, for example—indicates that there has still been a massive reduction in workforce through production efficiency, automation and AI.

For instance, figures from Oklahoma for the last five years indicate that, despite record profits and outputs, the workforce has reduced by a third in five years. If we go forward with future exploration, extraction and operation, how is that factored into your consideration of how the workforce looks? Are we going to look at a net loss of workforce no matter what happens?

Russell Borthwick: A lot of that has already been factored in. You can look at the Climate Change Committee again. The Seventh Carbon Budget says that the direct oil and gas workforce in Aberdeen had declined by a third from 2015 to 2021. A lot of that efficiency, if you like, has already been taken. It is a more efficient process than it used to be.

However, 154,000 people across the UK, possibly around a third of those in this region alone—bearing in mind that 1% of the UK population lives here—are heavily dependent on that. I do not think that we should be simply saying, "Well, we do not need them any more".

What we see at the moment is an opportunity gap opening up between the trajectory of what is economically viable to come out of the North Sea—certainly because of the fiscal rules at the moment—and what is possible, which is maintaining where we are. It is a graph that we demonstrated earlier.

The people value, the economic value and the energy security value are huge. Maintaining that current level would stop the haemorrhaging to some degree. Again, bear in mind that, of those people, only 10%—less than 10%—work for operators and 90% are largely employed by SMEs, blue-collar workers, the smart engineers and support workers who sit behind the scenes and make all this stuff work. Those jobs can be protected if we extract what is possible from the North Sea over the next 25 years.

Q132 **Mike Reader:** Richard, I will ask you the same question. If the Government said yes to all the requests from the industry, changing the fiscal regime, the regulatory regime, opening up opportunities, but we would still see productivity gains, meaning not as many jobs around, how does the union consider that? What is the union's position?

Richard Hardy: I am sure the GMB—I think Claire gave evidence to you last week or the week before—has highlighted that our significant concern is the cliff edge. Cliff edges are bad. Cliff edges are pretty much how we have delivered every other industrial transition in the UK, and every one of them has been a disaster for workers.

I am not an engineer, but I understand that if you are going to get more oil out of the North Sea basin, you are going to have to do it in more and more intelligent and engineeringly smart ways. That is almost certainly going to lead to a downward trajectory of jobs, but what it will not lead to is a cliff edge. If we have a cliff edge, we have social cohesion issues and other issues that we have discussed. A gradual decline also enables the UK Government and the Governments of the devolved nations to get together to try to deliver a jobs strategy that will pick up those people who are released, because at the moment we do not really have that.

I have famously gone on record several times to say that the Scottish Government have a green industrial strategy that is not green, not industrial and not a strategy. What we need is closer working across the devolved nations and the centre to get us to a situation where we are actually seeing—

Q133 **Mike Reader:** Would that not be the role of the North Sea Transition Authority? Isn't it a key part of its role to set that strategy?

Richard Hardy: I think it is bigger than that. You cannot expect one sector to deliver on behalf of the whole economy, so this has to be a whole economy position. Looking at the value of the low-carbon economy, at the moment it has the biggest balance of payments deficit it has ever had. There are lots of people benefiting from low-carbon energy and renewables in the UK, just not here.

We do not want a cliff edge. I do not think there is any union out there that is saying that there should be a cliff edge. What we need is a managed process, but what we need is real wins to point workers to and say, "That is a real job that you are going to be able to do", not "In 10 years' time there will be this at Mossmorran, Grangemouth or in Aberdeen".

Russell Borthwick: Every job unnecessarily lost is one job too many, so we should come at it from that end. We do not need to be losing as many jobs as we are losing, whether it is all of them or not is a point that we could come back to.

Going back to an industrial strategy, we have an industrial strategy. Clean energy is one of the eight pillars of the UK industrial strategy, which was published last June. Many countries, and we are seeing this again today with a report from the EU, need to look at what our definition of clean energy is. If clean energy is domestic gas in particular, which we need, which is better for the global environment than the imported equivalent and will create and retain jobs and bring economic value, do we define that as being clean energy? If we do, we already have an industrial strategy, and we could play to that.

Q134 **Mike Reader:** Russell, we have had evidence from the Chamber of Commerce, which I think we received this morning. I think I had underestimated the number of fly-in, fly-out workers that there were and how the sector in Aberdeen has an impact across the UK. You also talked about five sectors of the economy—tourism, food and drink, life sciences, digital tech and energy. Only 30% of the businesses were in that energy space. How has economic diversification helped to sustain the economy in Aberdeen? Is there more that we could do on diversification to deal with some of the challenges we are talking about?

Russell Borthwick: That is a great question. It comes back to whether Aberdeen did enough. History tells us that any place that is doing okay resists change and I think there was probably a long period where, if you wanted a job in Aberdeen, you could largely—I know this will talk across some of what Donna is saying—say that the economy was strong, opportunity was there, don't change anything. About 10 years ago, a more serious effort came to look at those growth sectors and to give them some oxygen, investment and brainpower behind how we grow them.

We have had some real success in all four of the other sectors that you mentioned, but as I said before, why would we throw the baby out with the bathwater? Why would we lose what is seen globally as probably the world's leading energy sector and supply chain? It has done very smart engineering and clever things in a really harsh environment in the North Sea. Why would we unnecessarily accelerate its decline?

We are looking at a cliff edge, and it will change. We hope that, if we can move and scale new energy projects, there will be jobs to transition into. Right now, there aren't, so let us build that bridge from one cliff edge to the other while we get up to speed with making sure that we are ready to roll out our new energy.

Those other four growth sectors are making good progress, but they will never replicate the economic value to Aberdeen, Scotland and the UK that a strong energy sector can bring.

Donna Hutchison: I think that it needs a place-based approach. The energy sector provides a foundation for hospitality, retail, tourism and other high-value sectors. Plenty of research has been done at the Institute for Fiscal Studies over the last 10 years on the impact in Aberdeen, but we need to look at the wider context.

If we think about things that affect the UK as a whole, such as young people and youth unemployment, where traditionally they would have gone into hospitality or retail, those opportunities are going. We will also have the AI piece. I think it is about those things being more magnified in Aberdeen, because those are factors affecting the UK as a whole, and then we have the energy sector on top. I do not think it can be overestimated when we have people coming to us saying, "I just want any job. I will do driving. I will do whatever".

My concern is that we then take jobs away from other people who did not benefit from the boom from the first time round, who are then going to be even further from the economic market and employment market, because there are more people fighting for the same opportunity, and that is to put food on the table and heat their homes.

Q135 **Mike Reader:** My final question is for Richard. What challenges do the pace and trajectory of decarbonisation globally present for Aberdeen?

Richard Hardy: That is a PhD thesis in its own right, isn't it? I think we have all said—I started off by saying it—that you cannot see Aberdeen separately from the rest of the UK, because of the way that the employment created in Aberdeen spreads out across the UK. Equally, you cannot separate Aberdeen from a global market. Any locality will always be vulnerable to fluctuations where the commodity that you are trading is a global commodity.

If Saudi Aramco suddenly turns up and starts offering significant increases in wages and low-tax outcomes, that is going to be a threat just as much as not giving new licences is. It has to play a part, but the UK Government's role, from the trade union's perspective, is to control and to influence the things that it can control and influence. If we start globalising the question, the answers become so thin that they become almost meaningless. What we need is answers that will work for workers in Aberdeen and those workers who work in Aberdeen who then take those wages and spend them elsewhere.

I do not think anybody in the union movement is sticking their fingers in their ears and saying, "No change, no change, no change". What we are saying is that change needs to be managed, and lo and behold, I am going to sound like a broken record, here is yet another industrial transition that we are going to make an absolute pig's ear of because—and apologies to colleagues in the room—we have solely left it to the market, largely, and strangely enough, the market did not manage it very well.

So, yes, I think it is going to have an influence, but the answers to this, or lots of the answers to this, sit locally and also within the hands of the UK Government.

Q136 **Chair:** I am reflecting on some of the things that Dave Whitehouse said to us in our last session and some of what you are saying. We have skills strategies, but I think the feedback we have had is that they are not producing jobs, and the big challenge is jobs. I think you have all made the case, and we heard it again in the informal session we had this morning, that maintaining existing jobs and existing production will keep people in work.

What I am not so clear on is what needs to happen. Perhaps you might start with this, Richard. What needs to happen to ensure that the new jobs are in place for people to go to, so we are not sitting here in five years or 10 years saying we still have this threat of a cliff edge.

Richard Hardy: If we talk about green energy, renewable generation, I think we need to look at the way that we publicly procure things. If we constantly take a view that the best way of delivering best value for the consumer or the taxpayer is to do things in the cheapest way, we will continue to see stuff made offshore and brought to the UK. I am more of an expert on this in the defence area, where we buy stuff in South Korea, because we can get three for the price of two, and then find that it is British money that is subsidising the South Korean tax base.

We face a situation where the deficit in low carbon between what is spent in the UK and what is spent abroad is some £560 million. What if we procure things in a different way so that we can take account of the prosperity agenda of using money to procure things for workers who then pay tax in the UK, rather than procuring things for workers who give money to the Indonesian Government, the Dubai Government or the Malaysian Government or ad infinitum? We have the same public procurement rules that we have had since the early 1980s. They are great at delivering cheap stuff, but what they are also great at doing is hollowing out communities and leaving people without jobs.

For me, that is one thing that we really have to look at in terms of using government policy, conditionality—and union recognition is obviously a big thing for us—public procurement that actually works for the public and actually works in delivering benefit to the taxpayer by bringing back into the UK tax revenue that is currently going elsewhere.

Chair: Russell, you were nodding.

Russell Borthwick: There are quite a lot of warm words around local content provision and commitments that people make to buy local and to bring local supply chains into major projects, but of course if those supply chains are broken or fractured or do not exist, either we have to import them or it slows down the very projects that we are trying to accelerate, and I think that is part of the issue.

You asked what would help to create the new generation of jobs that we are trying to get to but are not there yet. I think we talked this morning about lack of co-ordinated policy on key things around transmission charging and what that means, the NESO system review and planning, where obviously as we have seen some changes south of the border but not necessarily north of the border. All of these things are slowing down offshore wind projects, making them uninvestable, because there is no grid capacity for that power to be transmitted.

We want some clarity around whether the Government believe that carbon capture and storage is a technology they want to go after or whether it isn't, because at the moment we are sitting on huge economic potential and jobs. These are transition jobs. These are the classic bridge jobs between old world and new world, yet there is uncertainty about whether they are going to be realised or not.

I think the reason that we are creating this cliff edge, this gap, is that all of the things that we want to do and ought to do are being slowed down because supply chains might not be available or because there is a lack of clarity for investors in ScotWind, it is going to cost them too much to move their power to the key population bases further south. I think we need a much more joined-up, all-energy approach, which feels like it is not quite there now.

Q137 **Chair:** You said this earlier and we have heard it elsewhere, too, that it is the same companies—you used the phrase just now—and we need an all-energy approach. Some of this is about using investment in oil and gas as the bridge to support those companies to be able to gear up into renewables.

Russell Borthwick: I come back to this clumsy phrase that we use—supply chain—which does not do these world-class individuals and companies any favours at all. I will cite an example. Beam made a specific commitment 18 months or two years ago to say it was going to entirely focus its operations on new energy technologies, was not going to do any traditional oil and gas business. It is now no longer in business. We have heard from Port of Aberdeen, which invested £420 million of capital to build a new port effectively to service offshore wind, but only 1% of its revenue is currently coming from offshore wind.

You are absolutely right, Bill. These service companies, these brains and brawn behind the operations—I have heard many times that we need a new supply chain for new energy. We absolutely do not. We have the best supply chain in the world. The skills are highly transferable between the old work and the new work. Sometimes it is actually identical work. What we do not have is the work. It is always nice to hear £20 million here and £5 million there for skills projects to upskill people. There is no point in upskilling people who are already highly skilled when there is no work for them to do. We need to create the employment opportunities for them.

Richard Hardy: Coming in on the back of what Russell said, XLCC in Hunterston is a prime example of that. It was set up with a big fanfare. It was going to provide all this subsea cabling and then nobody bought anything from it because they have their contracts out for 10 years, because we had incentivised them to buy them cheaply from somewhere else, so the whole thing has basically collapsed into a big heap. It has given up its lease at Hunterston; it has given up its office lease. What should have been a fantastic success story for the west of Scotland ends up being yet another thing that those people who do not want to see an energy transition can beat people with and say, "Well, there you go. Look, there are no jobs," because when they are set up they do not work.

Q138 **Chair:** You mentioned nuclear earlier and now you mention Hunterston. What difference would it make if the Scottish Government ended the ban on new nuclear?

Richard Hardy: It would make a massive difference. We already see significant numbers of Scottish workers moving to Somerset to work on the Hinkley Point station. There is no doubt that if the Scottish Government relaxed their view, even on new nuclear technology like small modular reactors, you can deal with significant issues, you will get investment, you will create an engineering supply chain. There is actually an engineering supply chain in Scotland, but it is providing work for people in Somerset.

It will address particular potential areas of depopulation in the far north of Scotland at Dounreay, which you know strikes me as a fantastic place to put a small modular reactor. It is a game changer in respect of creating high-quality jobs. You start with construction design and then you have those enduring jobs in the operation. Operation of nuclear generates more work than operation of a wind farm, and those jobs are unionised and they are highly paid; a lot of that money finds its way back into the Exchequer and almost all of that money finds its way back into local economies.

Q139 **Chair:** Russell, do you agree with that?

Russell Borthwick: Yes. I have no evidence to back it up, but anecdotally, if you are okay with that—

Chair: We can delete that bit of your evidence.

Russell Borthwick: Anecdotally, this so-called oil and gas supply chain has happened to deploy its skills in oil and gas. That does not mean to say it is exclusively an oil and gas supply chain. The very special engineering skills that have been deployed in that are very transferable to defence, to nuclear and to other technologies. It is just that we need those technologies for them to deploy them to.

Q140 **Graeme Downie:** A quick question around language; we discussed this a little this morning. There are two elements. How careful should we be about language when discussing the industry? More broadly, and this has come up in other evidence sessions, if we are to maintain any kind of public confidence that these low-carbon economy jobs are coming, how helpful are phrases like "just transition" and "net zero"? I am hoping *Hansard* is getting the tone of my voice somewhere in here as well. Or should we just junk them entirely and start talking about the things that you have been talking about, just more practical interventions? What are the problems of the language on these?

Russell Borthwick: First, I hope so, because "just transition" is the most used and least understood phrase that we have come across. I think we probably need to leave it behind with other parts of language. It has become hugely and strangely divisive, much more so here than in any other nation around the world. We are creating a dirty versus clean, black versus white argument here when actually it is an "and" not an "or".

There is a much more sensible industrial strategy approach to this, but that negativity is putting investors off. Why would they come here when that is what is happening? It is putting young people off entering the industry. "Why would I want to work in that? Either there is a lack of clarity about future jobs or it is a dirty thing to go into, isn't it? I do not want to work there."

Language is hugely important. It is probably underestimated how important it is, but a change of language needs to be met with a pragmatic change of policy around taxation and future licensing. I think we create that economic boom, that opportunity to deploy the additional tax revenues to support defence spending, to support people's bills, in any way the Government want to spend it, and it just buys that time to get our ducks in a row in terms of getting those new energies ready for jobs at scale.

Donna Hutchison: On language, just define and stick with "just transition". For me it is about people remaining secure in their income, housing and their health as change happens. It needs to be language that is understood because most of the people we support have very little interest—slightly different in Aberdeen. They just want to know how they are going to pay less on their bills, and they don't care what they call it.

What I think is important—and I think Dave Whitehouse touched on this—is that it has become very weaponised and very polarised. Very much as an apolitical organisation, I say that we need to be careful about the language we use. We are speaking about people. We are not speaking in a trauma-informed way. Redundancy is a traumatic event. We are removing people's lives, we are impacting their mental health, we are seeing homelessness rates increase in the city, we are seeing child poverty rates increase in the city. This is what it comes back to. This is about the people, and about the people we support in the city, so I think language is important, being trauma-informed.

In net zero, we focus a lot on the "zero" and not on the "net", but these are the things that are cutting through. If I am honest, the opportunity to give evidence is welcome because I do not think we have had enough of the hearts and minds and the human impact. I would encourage you, if there is an opportunity through this, to speak to the individuals impacted right now. We had 20 of them in yesterday for a recruitment session with GB Energy. It was quite a heightened environment. Is this going to be local content? Are you going to prioritise Aberdeen people for Aberdeen jobs? It is that level of rhetoric coming out because people are hurting.

Richard Hardy: I might slightly disagree with Russell on the just transition. I mean, it wouldn't be right if we didn't, right? Net zero, I am slightly more agnostic about. Just transition I am passionate about because it is a trade union concept. It grew out of the green bans in Sydney in the 1960s, it grew out of the tar sands workers in Canada in the 1960s.

I absolutely agree with Donna that we should stick with what it means, which is how we take workers and the communities that they live in from one industrial age to another industrial age. That is what we are talking about. I agree with Russell that they have become the most misused two words everywhere around the world.

Q141 **Graeme Downie:** Would you say it has become an excuse by successive Governments to pretend they are doing something?

Richard Hardy: The most ludicrous one I heard was the Saudis saying that they were owed a just transition for leaving barrels of oil in the ground, that any transition that did not give them money for leaving stuff in the ground was unjust. There is nothing wrong with saying to people that things are going to change and Governments—whether UK, Scottish or local government—will do their best and industry will do its best, to make sure that that transition does not leave them in the situation that previous generations have been left in when we have de-industrialised. That is what a just transition means to me. As a trade unionist, I do not think that is a very big ask. I think delivering it is really difficult.

Net zero, I think, has become weaponised in a different way. If we ditched just transition, we need to come up with another way of saying to the people who are impacted by this, "We are going to do our best to have your back through this process" to avoid some of the issues that Donna has raised with the way it impacts wealth, health, mental health and the society that they live in and societal cohesion.

Donna Hutchison: For me, just transition is not a principle; it is a system design. When we look at it, it is that delivery plan around people and places and early intervention. One of the concerns I have is that by the time people present to us, it is too late. Stigma has kicked in and it is a crisis, "I have nowhere else to go". We are seeing people turn up at our door in tears, using food banks, and that is directly as a result of losing their job within the sector.

Q142 **Sir Christopher Chope:** Our job as a Committee is to hold the Government to account. We cannot do anything about the Administration in Holyrood; that is for Scottish MSPs to do. However, it seems from the picture you are painting that a lot of the problems are caused by the Government. I just want to drill down into that, to an extent.

In Norway, which shares the North Sea basin, it seems that they are exploiting their oil and gas reserves so that they are more self-sufficient than we are. You say that the Climate Change Committee concedes that we need 15 billion barrels of oil and gas by 2050. If we really exploited what is available in the North Sea basin, and perhaps west of Shetland, could we not increase our domestic supplies significantly and thereby provide more secure jobs for people already employed or wanting to be employed in the oil and gas industry?

Russell Borthwick: Yes. I think we have talked through some of this kind of policy-not-geology thing. It is reckoned by experts—and I am not one, but the geologist Professor John Underhill, who was with us this morning, is—that the North Sea could reasonably yield 9 billion barrels of oil and gas, mainly gas. We also talked about how our dependence on oil will start to decrease significantly in the mid-2030s. Our dependence on gas does not. It largely stays out to 2050. So that is where the requirement comes and although our overall energy use is declining and the impact of electricity, much of it powered by renewables, increases, it is only an increasing part of the mix.

I will very quickly tell you an anecdote about Norway. I was invited to Stavanger earlier this year. They asked me to speak at a conference. The subject they gave me to speak to was: how do we avoid ending up like Aberdeen? Terje Aasland, the Norwegian Energy Minister, was there. I spent some time with him.

It turned out that there were a few cracks appearing in the long-term cross-party consensus that has driven Norway's energy policy following last year's election. They were quite keen to point out that any breaking of that coalition might lead to some of the challenges that we are discussing today in Aberdeen and the wider UK. I did not realise I was being used as a patsy for that, but when I left the room it was quite clear that that is what they had in mind all along.

The answer is, yes, we could, and by doing so we can retain jobs and drive huge economic value—£165 billion of GVA is the difference between the 4 billion barrels that is the current trajectory to come out of the North Sea and the 8 billion or 9 billion potential. If that is cleaner than importing the equivalent, the question we ask again is why do we not choose to do that for energy security, for job security, for tax take? For all those reasons, that is a choice that this Government can make.

Q143 **Sir Christopher Chope:** Can I pursue you on the tax issue? One of the problems seems to be that in Norway there are more fiscal incentives to explore and exploit their natural gas and oil resources, whereas here our fiscal regime seems to be designed to disincentivise investment. Would you agree with that?

Russell Borthwick: Yes. I think that Professor Paul de Leeuw may be equally or better placed to talk about this, but there are some voices that will say that the headline tax rate in Norway is 78%, the same as it is in the UK. That is where the comparison ends because the incentives that are in place there for activity make it a workable long-term system in Norway, and the long term is probably also part of that. There have been so many changes in the UK that investors are not clear what is going to come next.

To be clear for those who do not know, the 78% is effectively made up of the 40% standard tax rate for oil and gas operators in the UK, which is still 15 points higher than any other sector pays corporation tax at. This is a levy of 38 points above that. However, the new oil and gas price mechanism that was brought forward at the last Budget by the Treasury accepts that the current premise is incorrect and that this is the new way forward.

The question we cannot understand is: why not put that in place now? At times of high prices, additional taxes will be paid. At times of normalised prices it will give the industry the opportunity to undertake the activity that you are asking me about and provide that additional energy security, job security and tax take. The Government then have a choice of how to deploy that additional tax.

One more point is that the OBR has said that this year the tax take from the North Sea will be somewhere between £4 billion and £6 billion. In 2030-31, the OBR says it will be £0.1 billion—£100 million—which is hardly worth a rounding in the national statistics. That is the current trajectory, and it does not need to be that way.

Richard Hardy: As a union, we do not necessarily have a policy position developed on oil and gas taxation. Comparing the UK with how Norway has approached oil and gas seems a bit odd. Norway has a $1 trillion sovereign wealth fund by doing things differently from the UK. Would I support us doing things more like Norway? Yes, but I think it is a bit late.

Russell Borthwick: We cannot turn the clock back on that, but the opportunity is there going forward.

Q144 **Sir Christopher Chope:** Obviously we have a national Government, and I am asking about what the national Government policy should be. Although we have come up here to discuss the plight of businesses in Aberdeen and the people working for them, this is a UK national issue. I know from the chart you were showing this morning, even with my constituents in the south of England, there are quite a lot of people who are actively employed in North Sea and in the Aberdeen economy.

What do you think can be done to try to alert the UK Government to the strength of feeling that there is in this area on this issue? It seems that the people of Aberdeen—and, most recently, specifically the people of Aberdeen South—understand these issues much better than quite a lot of other people across the United Kingdom.

Donna Hutchison: When we put in our written submission, we asked the Committee to recommend that the Government recognise real-time financial indicators as well as official warning metrics. There are no shortages of them in the third sector, I can assure you. We have to recognise that benefit claimant data is a crude metric. Not everybody who is affected will claim. There is also a lag. I think there are metrics and indicators available out there, and if there had been engagement with the third sector, I have a dozen case studies that I could provide but I really do not want to depress the room. There is that data out there.

It is about that place-based, person-centred, trauma-informed piece, and the metrics that go around that to provide that information so that we do not end up repeating what we have seen elsewhere in coalfields and things like that. We can absolutely mirror things such as the "State of the Scottish Coalfields" report on things like health expectancy. The population needs assessment that exists for Aberdeen gives a pretty stark trajectory for the next 10 years, and all that information is available publicly through the local authority.

Russell Borthwick: If we could not convince the people of Aberdeen South of the strength of our argument, we probably do not have a very strong argument. These are people affected every day running businesses, working for those businesses. Did that make any waves nationally? It was on the same day as a certain other by-election that might have taken more of the headlines.

It is about appearing before Committees such as this, continuing to hopefully make a reasoned case, backed up by evidence, for the Government saying, "You have choice A. You have choice B. This is something within your gift. There are economic and social opportunities that you can drive here linked to industrial strategy". We need to keep telling that story as convincingly as we can, because there really is jeopardy but there also does not need to be and there is opportunity.

Q145 **Sir Christopher Chope:** It is about getting the message across that the age of oil and gas is not over. We still need oil and gas. We need to support oil and gas resources being exploited, and not just talk about clean energy.

Russell Borthwick: We do. The Climate Change Committee and politicians say that we will need oil and gas for many decades to come, so the choice we have is where that comes from and I think we have laid out a pretty strong case. As much of it as possible for economic, social and job reasons and for environmental issues should come from our own waters.

Q146 **Sir Christopher Chope:** Will you be inviting Mr Burnham to come to Aberdeen to discuss these issues with you?

Russell Borthwick: Yes. I don't know if we can call him the incoming Prime Minister—I don't know if we are allowed to do that—but we were happy that Aberdeen received a mention when he spoke in Manchester earlier in the week. He did bracket us with Scunthorpe and Port Talbot, which we were not quite so sure about because I think the economy here is still relatively strong, or could be strong.

This does not need to become a post-industrial region. We still have it within our power to not let that happen. This is different from some of the examples that we have talked about, the north-east of England or some of our coalmining communities. This is a choice that we have in our gift to make right now. We will invite Mr Burnham to come up to talk about what he meant when he mentioned us on Monday. Certainly his predecessor has not made it since he has been in No. 10. That invitation will be extended, possibly around 17 July.

Q147 **Sir Christopher Chope:** When do you expect decisions to be made on the Jackdaw field, for example?

Russell Borthwick: I cannot answer when I expect them to be made. One of the things the Government did say when they came into power is that they would not interfere with previously awarded licences. Both Jackdaw and Rosebank meet that. There have been some legal complications, but it still comes back to the scope 3 emissions point. The operator, Adura, has made a pretty strong economic, climate-based case for why that is good. The gas that is produced by those sites can be 10% of the UK's total gas requirement, giving us much increased energy security. That will be eight times cleaner, with eight times lower carbon footprint, than imported LNG from Qatar or the States. I do not know why we would choose to not take that option.

Q148 **Graeme Downie:** Is there a way we can include the case studies that Donna Hutchison talked about in the written evidence? That would be helpful to make sure we are keeping the discussion on the communities and the individuals, if that is something that can be anonymised sufficiently.

Donna Hutchison: We can anonymise it. That is not a problem.

Chair: I want to go back to one or two of Russell's answers to Christopher Chope, who was an Energy Minister when the decision was taken not to go ahead with a sovereign wealth fund.

Sir Christopher Chope: I was never an Energy Minister.

Q149 **Chair:** I think you said there were 9 billion barrels of oil left in the UK continental shelf, Russell, and I think you previously said that we could meet half of our demand or thereabouts. Over how many years' production do you think that 9 billion barrels of oil will last?

Russell Borthwick: I think that is probably on a case-by-case basis. However, if we go back to around half of our need—so half of 15 billion—let's go there for now. That is about double the current trajectory. We looked at a graph earlier of declining overall energy demand in the UK, an increased proportion of that coming from clean energy through electricity generated by renewables and other sources, gas in particular still remains a pretty chunky part of our consumption map, even in 2050. If the point says that we still require some very small amounts of oil, but certainly significant amounts of gas in 2050 and beyond, the answer to the question will be that, as an economic and industrial opportunity, this is 25 to 30 years-plus in my estimation.

Q150 **Chair:** Gas more so than oil, as you were saying. David Whitehouse said last time we met that we could maintain existing levels of gas production, which is broadly similar to what you have just said, and that will help as demand falls to remove our reliance on imports of LNG. Just to confirm, oil is slightly different because it is predominantly refined overseas and then reimported. Is your point that it is predominantly gas?

Russell Borthwick: Yes, increasingly gas should be the discussion that we have. It is still going to be a significant part. Oil will always be required for the production of goods, whether that is medicines or whatever. I think that is understood. A lot of our domestic use comes from the UK, the North Sea, and is refined in Rotterdam because we cannot refine it in the UK and comes back for consumer use. That is an established fact.

Q151 **Chair:** You are saying that is still important?

Russell Borthwick: Absolutely, but I think gas is increasingly the question that we should be focusing on. If we can get that from domestic production, rather than tanking it halfway around the world after liquefying and regasifying it, why would we not do that?

Q152 **Chair:** Yes. In the case of both, this is jobs, supply chains and, to a greater or lesser degree, energy security.

Russell Borthwick: Plus significant GVA and tax revenue, and the Government could choose how they wish to reinvest that in the economy.

Chair: Thank you for that summary. That is very helpful. That is the end of our first panel. Thank you very much for your evidence.

Examination of witnesses

Witnesses: Michael Love, Dr Susan Grant and Professor Paul de Leeuw.

Q153 **Chair:** Welcome back to this afternoon's session of the Energy Security and Net Zero Committee from Robert Gordon University in Aberdeen with our inquiry into managing the future of UK oil and gas. Thank you to our second panel for joining us. Please introduce yourselves.

Professor de Leeuw: My name is Paul de Leeuw. I am a director at the Energy Transition Institute at Robert Gordon University. I am also on the board of the Engineering Construction Industry Training Board, which is a UK-wide organisation working on the future of the workforce across the UK in all energy sectors.

We have also put out a few recent reports, "Striking the Balance" last year and "Delivering Positive Energy" last week, which features in the conversation that we will have today about the future of the industry and the future of the north-east of Scotland.

Dr Grant: Good afternoon. I am Susan Grant. I am the strategic lead for energy transitions at North East Scotland College. My role is largely working with external partners in developing the college's resources and curriculum to deliver the energy transition.

Michael Love: Good afternoon, everyone. My name is Michael Love. I am the director of skills policy for OPITO, which is the global not-for-profit skills and standards body for safety-critical industries.

Q154 **Chair:** You are all very welcome, and we look forward to hearing your evidence. Michael, I will start with you. What more can be done to improve the transferability of skills in Aberdeen, and who should take on that responsibility?

Michael Love: We heard this from the previous panel, and I know Paul will speak on this shortly. The UK is fortunate, in a way. We already possess one of the world's most experienced offshore energy workforces. As we have heard, there is a high degree of transferability between oil and gas roles and the broader energy space. However, it is important to recognise that transferability may be high, but it is not necessarily frictionless. As we see it, the challenge is rarely technical capability. It is recognising existing competence quickly and consistently.

We have heard this message before, but the energy workforce should be viewed as just that: an all-energy workforce rather than separate workforces for oil and gas, offshore wind or carbon capture, et cetera. The role of skills policy in that is to focus on reducing duplication, improving portability and recognising prior learning with supporting labour market intelligence, which again I am sure Paul will speak to.

As I mentioned, transferability is not necessarily the biggest challenge. Timing, recognition and confidence are. I think good progress has been made through several initiatives, and the Energy Skills Passport being driven forward by OEUK and RenewableUK represents one of those.

As a collective, what we need to do more of is expand recognition of prior learning, continue to drive forward these initiatives that are inclusive and representative of an integrated sector—and this is a responsibility of skills bodies such as ourselves, education and Government to a degree—and encourage greater consistency in recognising equivalent competence across sectors. Workers invest in skills when they can see long-term opportunities, and employers invest in people when they have confidence in future demand.

Q155 **Chair:** How much of this is a matter of the jobs not being available rather than the transferability of skills?

Michael Love: When we talk about Aberdeen specifically—and thank you to you and the Committee for making the journey up north—the challenge here is not only about capability. It is about ensuring, as we said, that the opportunities emerge at the right pace. Workers do not typically transition to technologies. They transition to good jobs, and confidence, visibility of projects and the quality of employment matter just as much as the training and more technical skills-oriented side of things. We heard this earlier in passing that one national policy should not necessarily mean one identical regional solution. They need to reflect local industrial circumstances.

We speak about the number of jobs and, yes, the fact remains that they are not at the level we need to see yet to instil confidence in the workforce as a collective. The key message here is that the biggest workforce risk is not shortage of skills; it is losing those experienced people before these sectors create sufficient demand.

Q156 **Chair:** Susan, to what extent is the lack of transferability the issue for the energy transition?

Dr Grant: I don't know that it is at the moment. If anything, I agree with the previous panellists. Because everything is so transferable it is not a huge limiting factor. The main issue is the availability of the jobs and the alternatives available to people. It seems that the decline in employability in oil and gas is outstripping the pace of growth in the low-carbon energies. We have talked about this gap, this cliff edge, and that is a bigger issue for us.

There are things that we could do that are better. Michael has talked about recognition of prior learning. That is good and all very well, but we need to make sure that awarding bodies for qualifications are joined up and that we do not have companies looking at different awarding body qualifications with a different lens. Work with awarding bodies is helpful. When we are looking at new frameworks, we need to remember that we are building new technologies into those new frameworks and there can sometimes be a bit of a lag. That can take a little while.

We do not, for example, get electric vehicle technologies into the automotive frameworks quickly enough. It is that kind of thing. There are things we can do. I don't think it is a big barrier at the moment, but there are things that we need to keep an eye on, keep pace with, and work with industry and awarding bodies is important to ensure we can do that.

Q157 **Chair:** Paul, what is your assessment of how much of this is a skills issue and how much is an availability of opportunity issue?

Professor de Leeuw: If I can unpack your question a little, the North Sea is a national treasure. I think we talked before about how important it is. By our count there are fewer than 25 countries in the world who produce more than a million barrels. We are an elite group of countries. In Europe it is only two, Norway and the UK. What we have is very special and again it is how we manage it that is going to be critical. How we sustain that workforce and that capability is critical.

Why is it important? Because prevention is better than mitigation. Preventing the job losses in the first place means that you do not have to mitigate it by transferability or finding other alternatives. Prevention is key from a Government policy perspective, and other countries do this rather well.

What we found in our recent reports, including the one we put out last week around specifically the north-east of Scotland, is the issue around this Goldilocks zone. We see oil and gas declining faster than the renewables jobs are growing. It is not a matter of people do not want to work or do anything. The jobs are simply not there. That is not because there are no jobs. We have never spent as much money in the world on energy as we do now. They are just not here. You can see the workforce supply chain looking at opportunities elsewhere.

If you break down the workforce, roughly 25% of the workforce are in business-like roles—HR, finance, communications, legal. These jobs are hugely transferable. You can with a bit of induction training go straight from one sector to another sector. The remaining 75% are technical roles, but most of the transition training is measured in weeks and months. If you are a technician and you used to work on platforms in the North Sea and you need to go to high-voltage systems in offshore wind you can do that fairly quickly. We think most people, 90%, have medium-high transferability in the sector, so it is a very transferable sector.

Back to your question, Chair, it can only work if the jobs are there and that is our big worry in the Goldilocks zone. We need to manage this in such a way that we can have a seamless transfer from one industry to the other so that we can maintain our world-class ecosystem, supply chain and workforce here.

Q158 **Chair:** What are your top tips for securing a seamless transfer?

Professor de Leeuw: Do not lose the jobs in the first place. What has happened—and it sounds a very trivial comment, but it is hugely important—is that the world has changed in the last four years. If you look at what is happening in Russia and Ukraine, you see what is happening in the Nord Stream pipeline issues of a few years ago, you see what happened in the 12-day war last year, what is happening with the Iran conflict now, the world has changed and other countries have changed their policy.

Norway continues to provide energy resilience to Europe at a scale we have not seen before and taking the money they get from oil and gas to accelerate the renewables agenda. We see the Netherlands looking selectively at opening up gas fields in the North Sea. We see Denmark, which is a stalwart of net zero, extending licences until 2050 and redeveloping the Tyra gas field. They are now self-sufficient in gas.

Other countries are shifting this policy conversation. I do think there are some hugely helpful learnings from a UK policy element to asking if we can use that to sustain one industry and to make sure that they have the workforce and the supply chain, but we need it for the renewables part later on, so I think there is a real benefit of learning. Prevention is better than mitigation.

Q159 **Torcuil Crichton:** I want to ask Dr Grant about training for this. Is the college sector resourced for that?

Dr Grant: No is the short answer. I think it is commonly known that the college sector and the university sector are very cash-strapped at the moment. We have however been proactive in the region. We have worked with partnerships.

As I said, my role has been created to develop those external partnerships. Because the college sector has no significant capital revenue from public funds, and no additional revenue funding to support what we need to do here, we have worked with external partners. We have in the region a couple of great initiatives. We have the Energy Transition Skills Hub, which is a public-private funded enterprise. It has come about thanks to initial core funding from the Just Transition Fund which has been very welcome and helpful, but that has been supported by funding from the Energy Transition Zone, from the college's own meagre funds and support from industry.

One of the key lessons here is that partnership has been very important in terms of working on that skills agenda. We have said that a lot of skills are transferable but there are new technologies. We need to think about what we need to train people in those new technologies. If it is skills-based, you need physical space, small group teaching and specialist staff, so it is quite expensive to deliver.

The money that we have from private-public partnership to put the skills hub together has created that space. Now what we need is revenue funding to fund the places to go through it, because what the college does not have is any additional core funding to fund more course places and to put people through courses. We can run some commercial courses, that is true, but not everybody is in a position to pay for their training. If we want this to be just, we need to have some core funding as well.

Q160 **Torcuil Crichton:** Michael, Susan earlier talked about this quilt work of different award bodies and training agencies, and it is more like a jungle than a quilt really. How successful are bodies such as the NSTA and GB Energy in addressing the skills need of existing oil and gas workers?

Michael Love: I think you are right, so thank you for the question. The skills landscape is complicated. I think one of the key challenges that we face as an industry is making that landscape more accessible to young people, for example, so that they can better understand the opportunities that are available and what progression looks like and what long, meaningful careers may entail. OPITO's role in that landscape is an industry-owned, standard-setting body working with industry.

We have been working very closely with NSTA and GB Energy for some time now, both from a visibility perspective in terms of these being some of the opportunities that may result from certain projects coming online at certain times, but also trying to provide them with associated labour market intelligence that can help derisk project pipelines and help them understand the landscape more effectively.

What could still be clearer is the visibility, or lack thereof, of longer term and the bigger picture in terms of project cycles and what is coming on the horizon. We also need to see more instances of workforce planning being integrated into industrial policy. That is an area where some of the bodies that you mentioned, along with industry and education, can come together to strengthen that.

As I referenced earlier, there is a role in supporting and advocating for these place-based transition plans, reflecting these regional differences. That is something that requires endorsement from Government and quasi-Government entities.

Q161 **Torcuil Crichton:** Paul, when we think of skills training and college we think of young people, but do we have a demographic problem here with people who have been in the industry for some time, who have come up against that wall of redundancy and simply do not reskill themselves or just walk away from the workforce altogether? Is that part of the problem with the gap?

Professor de Leeuw: I think it is all ages. Certainly, the median age in the industry is early 40s, so it is the whole spectrum. Your question is absolutely pertinent because the future of work is fundamentally going to be different. At the moment, if you look particularly at the traditional oil and gas industry, the vast majority of people work on operating activities, operating pipelines, terminals, offshore fields and the onshore support. The future work is not like that at all.

The future work is about building wind farms, building the grid, building the substations, building all the infrastructure, the carbon capture, all the hydrogen. It is building things. It is far more vocational, far more project-based, far more place-based, it is far more temporary in nature.

Q162 **Torcuil Crichton:** Is it less skilled?

Professor de Leeuw: It is differently skilled. I think it has a different element to it. The reason I cannot address that question fully is because I don’t know how much of that is going to get done in the UK by the UK workforce and supply chain. We can import net zero from overseas and all we do is operate it here, but it depends on how much we are going to do in the UK.

Q163 **Torcuil Crichton:** You mean the workers and not just the components?

Professor de Leeuw: Yes. The choice we have is how much we do here, and that will determine what the skill level is. To operate a wind farm, a carbon capture facility or a hydrogen facility you need very few people, so the volume of work is around building the new energy future that will require that workforce and that will require the skills.

Back to Michael's point, it is absolutely right that unless you have clear visibility of the work, clear visibility of the pipeline of activities—that is the work that GB Energy and NSTA are doing—you cannot see what is coming up because the vast majority of people who I talk about work in the supply chain companies. They wait for contracts. The moment they get a contract, they will have the workforce to execute. No contract, no activity, no workforce required.

This planning of the long-term visibility is going to be key, but the work is changing, the skills are changing and everybody needs to make sure they have the skills for that.

Q164 **Graeme Downie:** I want to pick up on a couple of points made by both Paul and Susan. Paul, you talked about how we have that workforce ready to go to avoid the peaks and troughs you see in other industries. What skills should young people now be looking to train for? What should they be doing, and what should we ensure that the college sector is able to provide?

Professor de Leeuw: There are a couple of things that are going to be powerful. The first is to look from a university perspective. Most undergraduate courses are quite generic. You can do engineering, mechanical engineering or chemical engineering, but you do not specialise in specific energies. If you do a master's degree or a postgraduate degree, it has a far more specific element, so that we can look at offshore engineering, wind or specific AI linked to something else, we can make it very specific and very tailored. It is important to do that.

The other thing we can do is graduate apprentice-type schemes where you learn, you work, you make an economic contribution, and you get the benefit. Other countries do that very successfully. We can scale it up as a nation quite a lot. It will have a massive benefit with people in employment and learning, but also they learn the right skills at the right time.

Q165 **Graeme Downie:** Susan, if you can build on that, but also what is the current awareness in and around Aberdeen of the opportunities in low-carbon energy jobs for the future? How do young people in particular feel about that security? We covered that a little with the last panel.

Dr Grant: There are a few things to unpack there. I agree with what Paul is saying. A lot of what is going on now is that a lot of projects are in the construction phase. A lot of what we are delivering at the moment are construction jobs, the groundwork jobs, fabrication welding, that kind of stuff. We know that is happening, so we are basically working on what we know, because there is an awful lot of stuff in the future that is very uncertain. We are working on those construction phase jobs at the moment.

As Paul said, many of those skills are transferable, so it is not really all that critical what sector they end up working in. A lot of the engineering skills are based on principles that are applicable across the board so, again, we are delivering on engineering programmes that will allow people to work in oil and gas, in offshore wind or in a distillery if that is where they end up. We are very much trying to equip people with as broad a skills base as possible so that they are equipped to adapt themselves to work in different environments, depending on where the jobs are because it is very hard to predict and sell that to young people at the moment.

One of the other difficulties is that we talk about projects, and companies do not tend to recruit until they know they have a contract. The trouble is that when they get a contract, they need to move very quickly. For example, if you want them to have a modern apprentice, that is great, but an MA takes two or three years to train. If they do not take them on until they have the contract, they are not going to be useful to them quickly enough. There is a difficulty there in, for example, modern apprenticeships, learning on the job. It is a great way to train, a great skills base from which you can build a meaningful and valuable career, but how and when they recruit an apprentice is a challenge for businesses and therefore then everything is very reactive, so it is difficult for us to plan ahead in terms of that delivery.

In terms of awareness of opportunities, I think we spoke about language earlier. Language is very confusing for all of us, and it is especially confusing for young people. We talk about green jobs, we talk about clean jobs, we talk about net zero, we talk about the climate emergency. They are bewildered sometimes.

Q166 **Graeme Downie:** How do young people think about it?

Dr Grant: Maybe I am not young enough to comment on that. I think young people can be very influenced by that dirty/clean thing as well. Oil and gas, 10 years ago at the college we would have been full to the brim with people who wanted to be engineers to go into work offshore. Now, lots of things have influenced that over time—price crashes, cyclical boom-bust, that kind of thing—but we do not see that anymore. The talented young people who are doing well in STEM do not want to be engineers, or not to the same extent.

Q167 **Graeme Downie:** What do they want to be instead?

Dr Grant: They are going elsewhere. I don't know, maybe they want to be digital professionals.

Q168 **Graeme Downie:** They are moving towards the technical?

Dr Grant: Yes. They might be doing something entirely different, but we do not see the same demand for that oil and gas engineering route, which was very lucrative previously. I suppose the message for us is to get to young people in schools, to talk to them about the fact that this is not either/or. We have talked about that a lot today. It is very much a combined energy thing. It is not oil and gas or wind, or whatever. It is about the complexities. Even if we wanted to, we cannot just turn everything off in oil and gas and turn on the renewables.

What we have from Just Transition money—as part of the bid that we received for the energy skills hub that we spoke about—has also provisioned us with an outreach vehicle, so we can go to schools and talk to young people about the transition. We set them a challenge, designed by the Glasgow Science Centre, which is great. They come in and they have to think about how we make things more sustainable but, also, how that impacts on the affordability, the reliability, the communities that we work in.

It is about trying to get across to them the complexities, the number of different players and how much more complex the energy picture will be. The positive thing about that is the range of jobs that come with it. It is not all about being an engineer on an offshore platform. There are a whole lot of jobs and a whole lot of opportunity there, so trying to encourage them to realise that it will be evolving over time.

Michael Love: I want to very quickly build on aspects of what Susan was saying. We spend a lot of our time as an industry-owned organisation reinvesting into STEM, whether it is curriculum development, sponsorship of science centres, or that presence in schools to try to change the perception and understanding. What we see broadly—not in all cases but in some—are motivations changing for younger people.

Yes, the package, benefits and so on will always be important but in more and more of the conversations that I have had I hear young people identifying more strongly with an organisation's purpose. What are their values? That is an issue for the industry. If we do not get our shop window right in terms of getting out there, loud and proud, and saying that we are solving some of the most exciting and complex engineering and energy challenges of the modern age.

We will also shortly reach a bit of a tipping point where individuals will find themselves in that sweet spot of technical industry knowledge, maybe having been around for some time and having some experience, and coupling that with the digital skills, the digital side of things. They will be in very high demand.

Q169 **Graeme Downie:** Susan, you mentioned difficulties with budgets up to this point, and given the focus on trying to create these new jobs in Aberdeen and the challenges that the city faces, has skills provision in colleges in the north-east been particularly hit by cuts to college budgets in Scotland?

Dr Grant: We have probably managed our way through that pretty well. It is very difficult to do anything over and above what we were doing before and to equip ourselves to deliver on new technologies particularly. We have a new building thanks to the external initiatives, the external funding sources. We have also been very lucky.

Paul mentioned the Energy Construction Industry Training Board. They have put money into that building, which has enabled us to equip a whole welding academy. We have talked about construction jobs. We have had money from the Offshore Wind Fund; we have had money from SSEN to put equipment in there. All of that has been very valuable and useful. Revenue funding is still an issue for us. Again, we are applying to different pots of funding, all of which is useful but it is short term.

Q170 **Graeme Downie:** I was going to say, it is short term. It is not giving you longevity of funding because you are chasing every year.

Dr Grant: We are living year to year. We do not have momentum.

Q171 **Graeme Downie:** In trying to plan something, and we have talked about doing this multi-year, that is presumably much harder when you have year-on-year budgets and you are scratching.

Dr Grant: Yes. Funding pots are great. We have been very grateful for what we get, but what tends to happen is they are in a financial year, so we apply for it, they tell us we are going to get it in July, we might get the money in September, and we must have it spent by March. That does not allow us to plan ahead, and it is very difficult.

As I say, predicting how many people we need, what jobs they are going to be in, what skills they are going to need is hard enough. Equipping the workshops and getting the staff trained to do it all requires a bit of planning. Thinking about the curriculum we need to offer requires planning. That is very difficult when you do not know if you have the money to do it year on year.

Q172 **Graeme Downie:** Related to that, we have seen at UK Government level a shift to try to raise the profile and the prestige of technical skills so that they are at least matched to university. We see this across sectors such as defence, where these are the skills that you have mentioned. We need welding, and we particularly need to raise the profile among younger people. Is that something you think should happen in Scotland?

Dr Grant: Absolutely. From our point of view, we have always struggled to get that parity of esteem. There is that thing about university being the gold standard, so if you have done well at school that is where you should go, where, as you say, people can build very solid, very lucrative and very valuable careers through things like on-the-job training and the modern apprenticeships that I mentioned.

We have been lucky that we have been able to fulfil demand for modern apprenticeships, but if we are to encourage a bit more of that then, again, more MAs would be helpful. The other difficulty that we have to some extent in Scotland is the devolved nature of the apprenticeship levy and how it is applied differently south of the border, which can be difficult for a UK-based company that is trying to have training schemes that are consistent across the country.

Michael Love: I think it is made even more complicated by the growth and skills levy, and what the potential implications or design of that even look like.

Q173 **Graeme Downie:** Can you expand a little on that?

Michael Love: This was designed to be a bit of a revamp of the existing levy system under Skills England. We have seen a machinery of government change last year that moved the remit for Skills England as a body out of the Department for Education and into the Department for Work and Pensions, which has brought it closer to the NEETs, not in education, employment or training. There are pros and cons, but it does create another layer of waiting and seeing how this new system beds in.

I do not have a huge amount more to add on top of what Susan has covered but what needs to be remembered is that education providers are partners in workforce planning. They are not just providers of qualifications; they have a far broader remit and that is why visibility is so important.

Professor de Leeuw: I will add two dimensions to what my colleagues have already said. The first thing is the importance of a qualified workforce. If you look at the region you are in here today—Aberdeen and Aberdeenshire—half the working population is degree educated. There are very few places in the UK where that happens, so this kind of vocational degree and university degree is tremendous. The built-in ecosystem builds a world-class workforce supply chain. Having that education is critical.

The other thing that I think is important to notice is that it has economic value attached to it. If you look at people currently working in the offshore energy industry but normally in the oil and gas industry, the average salary in the industry in this region is twice the normal oil and gas salary. If we lose a job in oil and gas, we need to backfill up to two jobs somewhere else.

The combination of the right people with the right jobs, the right economic value and the right educational background, and upskilling and training, is going to be critical. That magic mix is going to be really important. That is a policy conversation. That is what Governments can do. That is what Governments can steer. It does not cost a lot of money, but it just needs some very good policy and planning.

Q174 **Sir Christopher Chope:** Dr Grant, how many courses in oil and gas are currently being run in your college?

Dr Grant: We do not label things for oil and gas. I think that is quite important.

Sir Christopher Chope: You do not label them?

Dr Grant: We do not label them, and they are not specifically run for oil and gas. We have done in the past, and for many years we ran the oil and gas training programme for OPITO, which was specifically for oil and gas offshore technicians, but that has now evolved into a more general energy-based programme. You will not look at our website and see lots of things labelled for oil and gas. We are very much delivering courses for energy, but we are also delivering transferable skills so that people can go to work in the industry of their choice. There is very little that is specific to oil and gas.

Q175 **Sir Christopher Chope:** The reason I ask is because Neil Cowie, the principal of your college, told the Scottish Affairs Committee that he is concerned that the courses aimed at oil and gas were not being taken up with such enthusiasm by students, so implying that there were courses aimed at oil and gas. Do no such courses exist?

Dr Grant: As I said before, we used to be inundated with people wanting to do a mechanical or electrical engineering programme. They were never labelled for oil and gas specifically. The only thing that we delivered specifically for oil and gas was the old TAP training programme. That, like I say, is not labelled as such anymore. What we are doing is very much delivering on that wider energy.

Q176 **Sir Christopher Chope:** Okay, he said that the way we are currently treating the North Sea and those operating in it is a cause for concern. Is it not a cause for concern for you?

Dr Grant: Yes, it is. I suppose part of our job as a social anchor is to provide opportunity for young people. I suppose it is going back to that basic thing: if there are no jobs for young people in the region, what are we training them for? Whether we call it an energy technician course or an oil and gas technician course, is not as important as the fact that there is or is not a job for them at the end of it.

Q177 **Sir Christopher Chope:** Can I ask the professor about this university?

Professor de Leeuw: Today is a quiet day because we had graduations, but we have students from over 30 different nations. It is normally like a mini-United Nations in this building. We all are at different stages of our energy journey, so we have people who are just starting their oil and gas journey, and we have people who are finishing their oil and gas journey, so we have courses across the whole energy spectrum. With undergraduate it is mainly generic, but in postgraduate and short courses we have a combination of new energy as well as traditional oil and gas courses.

Q178 **Sir Christopher Chope:** These are transferable skills that can be used in Aberdeen or elsewhere in the UK or overseas?

Professor de Leeuw: Yes, absolutely. What we recognised is there is a duality of purpose here. There are a lot of countries that have started or are in the middle of their oil and gas journey, decarbonising and are getting the latest technology, the latest insight, the latest capability. It is hugely important to help other people on their decarbonisation journey. We are at the heart of the offshore energy industry, and we have been providing that knowledge for decades and still do.

Q179 **Sir Christopher Chope:** What proportion of your students would be from Scotland or the UK compared with from overseas?

Professor de Leeuw: You have put me on the spot. I cannot answer that now, but I will follow up if that is okay.

Q180 **Sir Christopher Chope:** Roughly? Are we talking half and half?

Professor de Leeuw: No, it is far more domestic. It is probably 70% or 80% coming from the UK, and the remainder is overseas.

Q181 **Sir Christopher Chope:** When you are discussing educational establishments, do you think there will come a time when oil and gas is no longer a feature in the curriculum?

Professor de Leeuw: The tricky bit is if you look at the hard data, currently 75% or 80% of the world's primary energy comes from oil and gas. That is a historic element, and you cannot change it. If you look at the UK, 70% or 75% of primary energy comes from oil and gas at the moment. It is a fundamental part of the energy mix, so providing the core skills is important, but because of the transferability I talked about earlier, what you learn here can be very easily transferred to other areas. This is about good industry practice, and that is what we see happening. It is part of the curriculum, but like anything else, we follow what the demands of students and employers are going to be in the future.

Q182 **Sir Christopher Chope:** Do you think there is an issue about the teaching at schools not inculcating in pupils the importance, or the continuing importance and relevance, of the oil and gas industry as a potential career path?

Professor de Leeuw: The focus is that we all need energy. Energy has lifted billions of people out of poverty. We realise energy is part of the core mix. If you think about which economies do well around the world, it is the economies that have access to abundant cheap energy. What we see when school kids come here for open days is that they absolutely get that energy is part of the story. It is one of the most exciting things you can do. It is one of the most investment-intensive areas in the world now.

I think people get the energy story. What we need to ensure is that the narrative is very clear that it is a very exciting future. Some of the things we do here is the equivalent of taking people to Mars. Some of the excitement we have around energy we just need to get out and make it far more infectious to people, so that they think that is the career they want to be in.

Q183 **Sir Christopher Chope:** They are well-paid jobs as well.

Professor de Leeuw: As I said, offshore energy jobs are, by our analysis, paid twice what the average jobs are in this area, and they are more or less related. Yes, they are highly paid jobs, very attractive careers, in demand all over the world, and it is a fantastic career opportunity as well.

Michael Love: To build on Susan's point around the oil and gas programme, an apprenticeship programme that OPITO and the ECITB have run in collaboration with partners such as NESCol for around 27 years now, it traditionally had four disciplines—mechanical, electrical, mechanical and instrument and control. What we have realised is that introducing new units in hydrogen and carbon capture technologies is very straightforward, perhaps less so from the logistical side of delivering it and incorporating it into the curriculum. However, in terms of transferable skills, it speaks to that point very nicely. It allows the apprentices and young people—or maybe slightly older people who want to come back and do an apprenticeship—who enrol in this to leave with a more integrated understanding of the wider energy system. They can deploy these skills in different sectors, not just oil and gas. Yes, it may have been badged as oil and gas once upon a time, but the fact that it is now not that symbolises a bit of an evolution in how the sector is becoming more integrated.

Q184 **Mike Reader:** In our last session, we had quite a bit of evidence presented to us that workers felt their employers were not doing enough to support them in transitioning. Susan, you rightly said that we spoke to workers to hear their stories and that evidence is very clear. The vast majority felt that the employers in the industry were not doing enough to support either transition of jobs or supporting their retraining. What more could employers in the sector do to play a bigger role in helping people who are impacted by the natural decline of this sector, whether it is long term or short term, into other employment?

Professor de Leeuw: I have spent quite a long time of my life in the industry and working mainly for the operators, developers and looking after supply chain activities. If you look at the supply chain companies and Russell in the previous panel was very clear about it, there is a huge variety but most of the supply chain companies are small or medium-sized enterprises. They have only short-term contracts. It could be anywhere from a couple of weeks to a couple of months, and if they are lucky, maybe 12 months. For most of the big companies it is measured in a couple of years.

It is quite hard to take a workforce in this planning for 10 years unless you know the work is coming. The element we really need to get right is this whole visibility on investment, because investment drives activity and activity drives people. If you get the investment clarity right, you can follow through on what kind of people you need. From a supply chain company perspective, from an employer perspective, all they want to know is if they have a contract for the next 10 years, they can train their people and they can do amazing things and can give people longevity. If they have a contract for six weeks they are not going to be sure what they need to do with it. That is a real challenge.

The big difference we can collectively make is that we know the work is coming, we know we have to decarbonise, we know we have the wind activity to come. We can see how much we need to build. If we want to deliver the Government's plan, 50 GW by 2030, we need to do 6 GW of wind a year. That by my account is a wind turbine a day, if that really is coming. That is the activity we need to do. We are not doing it. If we do it we can plan for it. We can give the supply chain that visibility and we can say to people that it is coming, and so we are going to keep them there long term and train them and make sure they are equipped for the future.

Dr Grant: What we see is companies being less willing to invest in training at the moment, for the reasons that Paul has just explained. Certainly, I have spoken about getting private investment into colleges. We have been very grateful for the investment we have had, but that has largely come from big operators and organisations such as the ECITB. It is very difficult to get other organisations to commit to that at the moment because the future seems very uncertain for them. As long as the future is uncertain for companies, their willingness to invest in training and in their staff is not the size it would be if they had that confidence.

Michael Love: First, I should start with an apology, because I think in the answer to my last question I said that the apprenticeship programme had four disciplines and then I said mechanical twice. I blame the heat in the room. The fourth discipline is process, so I just thought I would correct that in the room.

Workforce development is a shared responsibility in a number of ways. Government and employers, from our perspective, have different but very complementary responsibilities as part of that. Government very much create the conditions for success, whereas employers ultimately recruit people and develop competence, and then you have education in there developing the capability.

To have a successful skills system, you need all three of those things. We are fortunate in that we operate in over 50 countries, so we bring quite a diverse international perspective to some of these conversations and successful movement in this arena involves common standards, employer ownership, workforce planning and recognised competence. Those are the fundamental building blocks that we need to look at, but it is a shared responsibility.

Q185 **Mike Reader:** Paul talked about the future of work, and I saw from my time in the construction sector people moving between sectors, moving between disciplines, is a lot more common and a lot less rigid now. You train as a civil engineer, and you are a civil engineer for life. You might eventually become a politician, who knows. How flexible do you think employers are in the sector of accepting people with other skills that are transferable? Is there enough mobility in the oil and gas sector particularly to allow people to move in and out of the sector between renewables, nuclear, between oil and gas or could the sector do more to improve the mobility between energy sectors?

Professor de Leeuw: Certain skills are very mobile. Scaffolders can go from different places, painters can go, welders can go but all have specific standards and meeting specific standards is quite hard even on the specific criteria. We need to make sure that we make this as frictionless as possible so we can get as much transferability, so common standards, common approaches, passports all around to make sure that works in the best possible way. Common training requirements would be very smart.

We are creating a world-class UK energy workforce. Anything that gets in the way of that is not helpful. It is very important that we get that bit right, that the workers can go anywhere without complexity in training. That is a critical factor. There is still individual choice because it is going to be place-based. Not everyone wants to work everywhere and that is an individual choice but at least the rest we can take away and make it easier for people.

Dr Grant: I do not know if there is very much to add to what Paul has said about that.

Q186 **Mike Reader:** When students are coming to you, are they thinking about having a more varied career than maybe 20 years ago when they thought, "I want to be a welder in the oil and gas sector and that is what I want to do for the rest of my life. I will train in that and I will do that"? Are you finding students coming through being more that they want to go into energy and explore their journey?

Dr Grant: No. They are probably more focused on their vocation so they can be a welder, but they will not necessarily know where they are going to apply their welding skills when they come in. They know that is the kind of job that they want to do but equally, okay, they are going to be a welder, they are going to work offshore for a year but then they get a better offer from Hinkley Point and off they go and then we need to train another welder. I think they are more vocationally motivated than sector-motivated, by and large.

Q187 **Mike Reader:** Michael, to what extent can the Government solve the skills transition, given the private sector does the hiring but may not see the long-term benefits of investing in the workforce?

Michael Love: I certainly don't think this is a case of the Government just training everyone. I don't think that is helpful. Government need to be the ones to build the strong foundations. The fact remains that employers remain best placed to develop that role-specific competence once individuals enter employment. Employers absolutely do have that responsibility to do more training, but it is contingent on the three aspects outlined earlier, the tripartite agreement between employers, education and government.

To get to the crux of the question, what the Government could do more of is to help incentivise workforce development among that community, work with the sector to advocate the reduction in duplication where we are not introducing additional risk into the equation. That will ease some of the friction around transferability. Do what is in their power to do in terms of supporting ongoing employer collaboration. I know collaboration is a buzz word, but it is vital in this topic.

Q188 **Mike Reader:** This is a very niche question for which you may not have an answer. We have heard evidence from the ECITB, and you have mentioned them as well. Do you have any views on how the potential merger with the CITB could impact on this specialist training? I know some of the industries are very concerned that the mechanical and electrical specialist training would be lost in the merger of the two bodies.

Michael Love: I don't want to pre-empt the results of the consultation process or the direction that the DWP and the broader Government may decide to take. I understand the rationale in terms of consolidating both the CITB and the ECITB under one structure to improve perhaps consistency and standardisation. What we do not want to see is that focus on certain sector-specific experience and expertise lost in that merger. Our focus needs to be on employers, levy payers, whomever, still being afforded access to the best possible opportunities for their specific needs.

Q189 **Mike Reader:** If you are a supplier of offshore remote vehicles, do you pay a levy into the ECITB for training, or is the levy restricted to those who have construction and engineering skills?

Michael Love: Not that I am aware of, but Paul is a board member. He may be better placed.

Professor de Leeuw: I will be very careful what I say. It is a live process so you will appreciate I cannot say that much. There are a lot of members paying the fees to the ECITB for training elements. I cannot remember the full list of all organisations, but it is a very wide spectrum across the engineering and construction sector.

Q190 **Mike Reader:** Perhaps this is one for our discussion of where the report goes, but we have some parts of the sector paying a levy and others do not. In sectors such as the construction sector where we have to have a bigger amount of training there is the building safety levy, which everyone paid into to deal with the changes the industry faces post-Grenfell, or as we are discussing the change of fiscal and regulatory environments for the oil and gas sector, where there is a consideration of a transition levy that sits on the industry to help support this and fund the subsidy and support long term to support the industry.

Professor de Leeuw: The observation that I have is this was set up, the ECITB and the CITB, a few years ago. Of course, the industry has changed. Companies have changed. Everything needs a refresh every so often so I think that is a good question, is everybody who should pay a levy paying a levy? Is all the money going to the right people? Does it need to be re-engineered in the way where we get the right amount of money? Probably.

Q191 **Torcuil Crichton:** Columbo-style, I have one last question. Susan and Michael have both alluded to the difference between the availability of funding and emphasis on training for young people at a UK level and a Scottish level. Is there a mismatch there? Are we missing something in devolution or does devolution add something extra to the mix?

Dr Grant: My comment was specifically about the apprenticeship levy, which is administered differently north of the border than it is south of the border. I think that creates some issues. If we are talking to UK-based companies that are trying to have national, UK training schemes but they cannot apply the levy in the same way north of the border as they can south of the border, that can create some issues as far as that is concerned.

Professor de Leeuw: Of course, there are a couple of new bodies down in England—Skills England and the Office for Clean Energy Jobs—Skills Development Scotland and other organisations here in Scotland. I do think if you create new entities you probably create new conversations. I think a bit of alignment probably is good to double check that everything works as efficiently as it was originally designed for.

Q192 **Torcuil Crichton:** Do the teams move at the same speed or different speeds?

Michael Love: The key difference for us, and the question we get asked very commonly by those in the industry is around qualification levels. How does an SCQF—which is the Scottish Credit and Qualifications Framework, qualification level 6—correspond to the Regulated Qualifications Framework in England? In that instance it would come out around a level 3. Susan can kick me if that is wrong, but I think that is right.

Q193 **Torcuil Crichton:** That is surprising. I mean surprising that they should—

Michael Love: Exactly, and there is a different system for Wales and Northern Ireland, and there is the European Qualifications Framework as well. Therefore, it is again linked to a broader point around how we make the skills system, the progression through the opportunity across energy, which does require these underpinning qualifications and courses, palatable and accessible for every man and every woman who is not embedded in the skills space day in and day out, as we are.

Dr Grant: The vocational qualifications are different in England and Scotland as well. An SVQ is different from an NVQ so again there are nuances and slight differences. Some employers don’t care, and some do.

Torcuil Crichton: Okay. I think I have opened a can of worms. No more questions, but your answers are noted.

Chair: Thank you all very much for your evidence this afternoon. That is the end of our session. Once again, thank you to our hosts, Robert Gordon University, for this afternoon and kindly allowing us to be here.