HOUSE OF COMMONS

Energy Security and Net Zero Committee

Oral evidence: Securing the domestic supply chain, HC 298

Monday 15 May 2024

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Watch the meeting

Members present: Mark Garnier (Chair); Vicky Ford; Barry Gardiner; Lloyd Russell-Moyle; Derek Thomas.

Questions 196 – 273

Witnesses

I: Andrew Bowie MP, Parliamentary Under Secretary of State (Minister for Nuclear and Renewables), Department for Energy Security and Net Zero; Ben Golding, Director of Strategy, Department for Energy Security and Net Zero.

Written evidence from witnesses:

– Department for Energy Security and Net Zero

Examination of witnesses

Witnesses: Andrew Bowie and Ben Golding.

Q196 **Chair:** Good morning. Thank you for coming to this session of the domestic supply chain inquiry by the Energy Security and Net Zero Select Committee. We have this morning Andrew Bowie, the Minister, and Ben Golding from the Department of Energy Security and Net Zero.

Minister, we have had a lot of evidence that has been coming in from people about the lack of necessary capacity and capabilities within supply chains. What are the Government's plans to do with this?

Specifically on this, there are a couple of interesting points. We are potentially looking at 15 GW of supply coming through every year for the next 10 years. A report was written—I cannot remember who wrote it—indicating that we will have a 7.8 GW shortfall by the end of 2028. There is a huge problem with getting access to the grid. There is a conundrum. How are you going to fix it?

Andrew Bowie: We are fully aware of the challenges, and we do have challenges. First, thank you very much for the invitation to appear before you again on what is a really important topic. I am very pleased that the Committee is taking an interest in this.

As I said, the Department is fully aware of the challenges. We are in a globally competitive race for a finite resource. As we sit here right now, we do not have the necessary manufacturing or supply chain capability within the United Kingdom to enable us to reach our targets, which is why the Government are determined that, as we move forward with our ambitious targets for developing fixed-bottom offshore wind, floating offshore wind, solar, new nuclear and the other technologies that we are investing in, we at the same time build up the manufacturing base so we can have a supply chain within the UK without being beholden on foreign suppliers.

As I said, we are all scrabbling for the same finite resource across the world, as every country seeks to decarbonise and to become more energy-secure and independent.

Q197 **Chair:** We have some questions more specifically on the supply chain, but I am particularly interested in whether DESNZ has an analysis of the UK's supply chain vulnerabilities. Are you on top of the details of where these problems are?

Andrew Bowie: Yes, absolutely.

Q198 **Chair:** Is that informing your policy?

Andrew Bowie: Yes, 100%. That is why we have announced the Green Industries Growth Accelerator and why more detail will be forthcoming on the sustainable industry rewards scheme, which will be launched alongside auction round 7. That is why we are engaging with industry.

For example, in our small modular reactor down-selection programme, a key factor in terms of the decision to award to that vendor will be their commitment to building up a UK-based supply chain and manufacturing base to deliver that next generation of nuclear capacity.

We want to see this through the increase in offshore wind, for example. We are really proud of what we have done so far. We have the first to the fifth-largest offshore wind farms in the world. Everybody would acknowledge that we do not have the jobs onshore to reflect the huge build that has been going on offshore. We are still reliant on foreign manufacturing and supply chains to enable us to build. We want to move away from that so that this next phase of development in the North sea has a tangible impact onshore and less of a reliance on foreign imports.

Q199 **Chair:** There is a problem with the grid, is there not?

Andrew Bowie: Yes.

Q200 **Chair:** I gather that there is a huge amount of potential capacity that would come in if they could get access to the grid. There are these problems with access to the grid. That seems to be something that is causing a huge number of problems.

Andrew Bowie: On the grid, last year we commissioned Nick Winser to conduct a review into connectivity. At the same time the ESO and Ofgem are examining exactly what they need to do to bring the grid up to speed. It is frankly a disgrace that there are companies, organisations and individuals who are having to wait sometimes up to 14 years to get connected to the national grid. That is not sustainable: it is bad for investment and it is holding this country back.

In his report, Nick Winser made 10 recommendations. The Government accepted and are adopting all 10 points. We are engaging on one of the biggest improvements to the national grid in history. We are expecting to see a fourfold increase in demand in electricity over the next 10 years alone. We need to build the infrastructure here in the UK to deliver that.

Our Great Grid Upgrade scheme, the response to Nick Winser and the build that is going on across the UK are intended to deliver the capacity we need so that we do not have the strain that we have at the minute and those ridiculous waiting periods that companies are having to wait just now.

Q201 **Chair:** I should know who authored this report—it came up in the *New Statesman* yesterday—but there is a suggestion in it that this lack of capacity suggests that by the end of 2028 we will be seeing brownouts and blackouts. Are you confident that we will not get brownouts and blackouts?

Andrew Bowie: Yes. We are all aware of the looming capacity gap. That is why we are taking the decisions that we are taking right now: to ensure that does not happen.

Q202 **Barry Gardiner:** When we are looking at the supply chain and the problems, there is a real issue about transmission infrastructure. We know that and we know the difficulties in tackling that. What industry has told us in its submissions is that the top two are not about transmission infrastructure; they are about no visibility of the project pipeline and inconsistent policies. Those things are very much in your gift.

We have to accept that certain things are not in your power, but there are things that are. Those are the things that industry are telling us are creating real problems for them to get in the investment that they need.

Andrew Bowie: We hear the same concerns. Industry raise those with us. When it comes to the project pipeline, that is one of the reasons we have instigated annual auction rounds. From this year, there will be an auction round every year to give more certainty and visibility of what projects are coming downstream.

We have created taskforces with the solar industry, the offshore wind industry, the Carbon Capture and Storage Association, the Hydrogen Delivery Council and the nuclear bodies to ensure there is this holistic view of what projects are coming downstream so the industry does have the confidence that there will be opportunities to bid in for and develop a manufacturing base to support all of these projects coming through.

Q203 **Barry Gardiner:** They have said that a project-by-project approach is not a pipeline and supply chain investments take more than a project to pay back. They are telling us that they need something that is more comprehensive and more long term.

Andrew Bowie: We are very much open to taking any action recommended or asked for by industry to ensure we build up this manufacturing base. We are aware of the huge challenges facing this country and of the concerns being raised by industry and others.

We will take whatever action is necessary to ensure we do not end up in the situation that we have done over the past 10 years, with huge success in building—as I said, we have the first to the fifth-largest offshore wind farms—but no tangible visible onshore legacy for that. Barry, we are listening and we will act in response.

Q204 **Barry Gardiner:** We are very pleased about the CfD allocation round and making that annualised. That is one element. What about the complaint about inconsistent policies? There is a disjunct between some things that are said and some things that are in place—you know what I am thinking of here. This is about the lack of clarity that industry feels or the hesitancy that it feels to invest because it is getting mixed signals from Government.

Andrew Bowie: I hear that. I understand their concerns, but I would dispute their interpretation of there being inconsistent messages from Government or a lack of clarity in what our position is.

Q205 **Barry Gardiner:** Let me give you what is perhaps the most obvious example: the pushing back of new electric cars and vans to 2035, yet keeping in place the fact that 80% of those built by 2030 have to be electric. Industry are saying that, on the one hand, the message the Government are giving to the public is, "Do not worry about this. You have another five years to bother about it," but the message they are giving to industry is, "No, you still have to be up there with 80% by 2030."

That gives the industry real problems. If 80% of their stuff has to be electric and yet they do not have the demand from the public for it, because the public sit back and say, "I have more time to do this," that creates a problem for them not just in terms of their cash flow potentially but in terms of their willingness to invest.

Andrew Bowie: I understand. I hear these criticisms all the time, but the Prime Minister was very clear when he made that decision that, while we are resolutely committed to our net zero target of 2050 and decarbonising the grid by 2035, we have to take pragmatic and proportionate steps. We cannot do it at the cost of making people poorer in the process.

However, getting the industry to a place where it is ready to respond to the expected upsurge in demand for specifically electric vehicles by 2035 with that five-year gap is something that we think is eminently sensible. It sends a signal that the industry should be ready for the 2035 mandate to kick in, which, by the way, does bring us in line with most EU countries on this.

Barry Gardiner: I am just passing on what industry is saying.

Andrew Bowie: I understand.

Q206 **Lloyd Russell-Moyle:** One might ask why you do not put a requirement on fleet vehicle purchases. That would be the thing that would drive down the second-hand market as well, which is really key for people to buy in.

We have been told that the US Inflation Reduction Act and the EU Net-Zero Industry Act are driving investment away from the UK. How do the Government plan on responding to the measures set out in these Acts?

Andrew Bowie: We have brought forward the £900 million Green Industries Growth Accelerator, which will give targeted support to investment coming into the United Kingdom. We will be giving more information on the sustainable industry rewards scheme, which will be launched in line with AR7, which will encourage and incentivise investment in mainly deprived areas in the United Kingdom, building up our green manufacturing base.

We are still up there in the three or four best countries in the world in which to invest in green and clean technology. I am very proud of that fact. While we welcome what the United States of America and indeed the

EU responses are doing to drive those countries towards their own net zero targets, which from a global perspective is something we want to see, we still think, through our world-leading contracts for difference, which are recognised and championed by industry, and through what we have achieved in the North sea and indeed in other technologies, the United Kingdom is still one of the most investable places in the world.

People can come and invest in the UK, knowing about the certainty, our open markets and our long-established processes. That puts us in a prime position. We are not going to go toe to toe in a subsidy war with the United States of America, however.

Q207 **Lloyd Russell-Moyle:** The USA and the EU's measures encourage inward investment within their countries, which means that cash is then less available to come to us. Are you not worried that we have relied for too long on external investment and we have not been investing enough internally?

If you look at the offshore wind sector, in terms of public entities, including public pensions, the UK only owns 0.03% whereas the Government of Malaysia owns 0.1% of our offshore wind capability, the Government of Denmark owns 20.4%, and Norway owns 9.2%. The city of Munich owns 0.8%, which is more than the UK Government have invested in terms of ownership and the assets of offshore wind themselves.

I know you talk about security of energy supply. Is there not a danger that we have relied too much on external investment and have not built up an inward investment market where people want to invest and the Government are willing to match that investment?

Andrew Bowie: I would love to see more UK-based entities investing in our clean green future.

Q208 **Lloyd Russell-Moyle:** Why is that not happening?

Andrew Bowie: Just yesterday morning I had a roundtable with the Chancellor of the Exchequer and UK-based pension funds encouraging them to do just that. It is a mark of pride, frankly. The United Kingdom is such an attractive destination for inward investors from outside the United Kingdom to invest their money. It shows the confidence that the rest of the world has in our ability to deliver this, as well as the confidence that they have in the stability of the United Kingdom as a place in which to invest and the openness of the United Kingdom to inward investment. It is something that we should be very proud of.

I am certainly not going to try in any way to put off anybody from wanting to invest in the United Kingdom. In fact, we should be very proud of the fact that they want to invest here.

Q209 **Lloyd Russell-Moyle:** Flash sales are always very popular with vultures. If our pension funds are not investing, it raises a moment of concern in my mind that home investment is not as buoyant as inward investment. What does the home market know? Why is it not investing?

Andrew Bowie: The idea that they are not investing is just not the case.

Q210 **Lloyd Russell-Moyle:** They are not investing in the same numbers.

Andrew Bowie: I want to see more UK-based investors in this technology—of course I do. I also do not want to do anything that would put off inward investment from outside the United Kingdom. As I said, it is a point of pride that we are seen as such an investable destination by countries across the world. By the way, as an old-fashioned open and free marketeer, it is right and proper that we should be welcoming investment.

Q211 **Lloyd Russell-Moyle:** In terms of the procurement of long-term contracts like cables, we have heard how Germany, for example, has bundled all the contracts together and made long-term procurements to ensure those supply lines are secured. Then companies can invest in building the factories at the necessary scale in Germany.

Why have we not been doing the same? If you say we have, can you give examples of where we have been bundling projects for supply line goods?

Andrew Bowie: Yes, I can. Just this morning it was reported in the *Financial Times*—

Lloyd Russell-Moyle: I have not read my issue today.

Andrew Bowie: A company that I have been engaged with for some time, Sumitomo, a Japanese company, will be opening a manufacturing plant in the Highlands to develop HVDC cables to support operations in the North sea. That is building up our domestic supply chain and creating jobs in the United Kingdom to deliver cables for UK-based projects.

Q212 **Lloyd Russell-Moyle:** Will that secure enough cable capability for the next 10 years?

Andrew Bowie: It is a commercial decision between the operators, the developers and the companies that are developing these factories.

Q213 **Lloyd Russell-Moyle:** In other countries, the Government have a role in bringing those commercial decisions together and having a long-term plan. They say, "We need to ensure that the full capacity is onshored." Are we just relying on the good will of clever investors or are we co-ordinating and marshalling those commercial decisions so we make sure our capability is being secured?

Andrew Bowie: There is obviously a Government role.

Q214 **Lloyd Russell-Moyle:** What have you done?

Andrew Bowie: In terms of bringing manufacturing onshore, there is the company that I just referenced. There have been ongoing discussions between my Department, the Department for Business and Trade, the

Scottish Government and others to ensure we start to build up this capacity.

The sustainable industry rewards—I cannot go into too much detail right now, but in the next few weeks more detail will be forthcoming—will be awarding support and assistance to those companies that are bidding through the auction round processes to build up the manufacturing base right here.

Of course Government have a role, but it is a commercial decision of those companies, the developers and indeed those operating the factories as to how they go about their business and how they secure contracts. I do not believe that the Government have a role in that, no, but we should have a role in terms of—

Q215 **Lloyd Russell-Moyle:** You do not believe the Government have a role in co-ordinating those contracts so there is long-term security of supply in the UK.

Andrew Bowie: We have a role in attracting the investment, building up that manufacturing base and making the UK the best place in the world in which to invest and develop a business.

Q216 **Lloyd Russell-Moyle:** How do you do it, apart from through osmosis?

Andrew Bowie: We have to make it a very attractive option for those companies to buy the cables that are being developed here in the United Kingdom. I say cables, but I also mean other parts of energy infrastructure.

Lloyd Russell-Moyle: Other goods and services.

Andrew Bowie: Yes, absolutely.

Q217 **Lloyd Russell-Moyle:** Do the Government have a percentage aim for what is secured domestically on goods and services?

Andrew Bowie: I do not think we have one.

Ben Golding: We do not have a percentage estimate, no.

Q218 **Lloyd Russell-Moyle:** If you do not set a target, if it is an ambition and you are saying to the people who are bidding for CfDs and others, "This is the ambition we would like to meet, but we are not going to bind you to it," how do you expect to be able to encourage companies to look at those options?

Andrew Bowie: By making the UK the best place in which to invest and grow a manufacturing base in the world. That is my aim; that is my ambition; that is what we are doing.

Q219 **Lloyd Russell-Moyle:** You have no measurable target to achieve that, so what other steps are you taking to marshal companies to onshore here?

Ben Golding: Just to expand, we do have measurable targets for generation capacity deployment. To try to draw it together a bit more, we are looking at various things to set more of a long-term context. For instance, the commitment to a strategic spatial energy plan is trying to work with the energy system operator to set out the long-term trajectory of what we need where across the UK to give certainty to industry and that confidence to invest, including in the supply chain.

Q220 **Derek Thomas:** On offshore wind, AR6 and 7 are the last opportunities to award contracts for 21 GW, which I understand is how much offshore wind we need to be operational by 2030. Is that still achievable?

Andrew Bowie: Yes, it is 100% achievable.

Q221 **Derek Thomas:** That is great. We have been told that the CfD sustainable industry rewards will have little effect on growing the domestic supply chains. Why does the sustainable industry rewards scheme not include considerations on UK content? Why does it only apply to the offshore wind sector?

Andrew Bowie: It does. These companies will be incentivised through sustainable industry rewards to invest in deprived areas within the United Kingdom. That is the entire point of having the sustainable industry rewards scheme.

The reason that we are focused on offshore wind is because that is the area we are going to see most growth in over the next few years. I think we all agree that we need to do much more to build up a tangible legacy from the huge builds that are going on in the North sea and are projected to happen in the Celtic sea and indeed other waters off the UK.

Q222 **Derek Thomas:** As you know, I am a West Cornwall MP. We got very engaged in FLOW, floating offshore wind. We had some disappointment in terms of what we had done locally to try to support development there.

You have early awards and CfD things secured, but it is about certainty and how you plan ahead. Investors in UK renewable energy supply chains continue to stress the importance of having certainty in terms of future floating offshore wind platforms. Given that, why do the Government continue to have this short-term approach to floating offshore wind procurement with auction rounds only clearing a fraction of the eligible projects in allocation rounds?

Andrew Bowie: I hear what you say. First, on the FLOWMIS procedure, I understand the disappointment. Officials within the Department are engaging right now with ports that were not successful through the FLOWMIS project to work through how we can, as a Government and as a country, support them moving forward to take advantage of the huge increase in floating offshore wind manufacturing that will happen over the next few years.

In terms of auction rounds and the budgets for floating, the Secretary of State has the opportunity, through the auction round process, to revise upwards the budget for any of the pots of money that are available for certain technologies. When it comes to having to take the decision, the Secretary of State will take a view as to whether or not that is required for FLOW. We hear the concerns from the industry, though.

Q223 **Derek Thomas:** We saw that in one round where no one secured any CfDs. In the next one, we did not, where we wanted to.

Andrew Bowie: Mr Thomas, that demonstrates that the Government have listened, learned and taken action by increasing the strike price for offshore by 72%.

Q224 **Derek Thomas:** We recognise the process. In terms of security, certainty and the ambition that the Government have to deliver offshore wind, will the Government release a CfD auction plan with draft budgets and technology targets a few years in advance rather than this annual process?

Ben Golding: The current intention is to stick to the annual process, but we absolutely hear the need for certainty as much as possible.

Q225 **Vicky Ford:** I am going to talk about critical minerals. Before I start, Minister, some of us went to go and see a company called Geothermal Engineering in Cornwall, which have discovered the highest concentration of lithium brine in the world with some of the lowest cross-contamination with magnesium. Thinking about it, I am utterly surprised that that place is not absolutely swarming with help from Whitehall, thinking about how to get this through planning approvals quickly and get it going and so on.

Things are changing very rapidly. Last week, the Defence Secretary said we are on a war footing. The Prime Minister has recently spoken about China being the greatest state threat to our economic security. Even from what we saw last month, the world has changed since.

This is just my comment to you. Where we do find critical minerals in this country, we need to be massively faster about getting that into our defence and security. I am going to leave that with you.

We have heard criticism that the critical minerals strategy is vague. I have in front of me the task and finish group report, which is lovely but it is written by industry. You do not get to a recommendation until page 88 and the recommendations are pretty woolly. The key recommendation is that, "Prioritising the mitigation of geopolitical risks with key producer countries should be central."

Andrew Bowie: That is absolutely right.

Q226 **Vicky Ford:** Give me one country where you have changed our foreign policy strategy in the past 12 months because of critical minerals. Can you give me one example?

Andrew Bowie: Foreign policy is determined by the FCDO. As a former Foreign Office Minister, I know you will appreciate that. The critical minerals brief is held across three different Departments, the lead Department being the Department for Business and Trade.

Having just adopted this into my portfolio, I have engaged already with the Government of Bolivia and have had discussions with international counterparts, including the United States and Canada, as to how we build up our capacity in what traditionally was called the west to counter the increasingly unstable geopolitical world in which we are operating.

Q227 **Vicky Ford:** With respect, I was a senior Minister in that Department 18 months ago. If the weight that we are putting on critical minerals is the same as it was 18 months ago, it is not good enough for a war footing, given the recommendations that have come out since from this task and finish group.

Andrew Bowie: Ms Ford, I completely agree with you.

Q228 **Vicky Ford:** Has it changed?

Andrew Bowie: Yes, it has changed. One prime example that I can give of that is the fact that the critical minerals lead Minister, Nus Ghani, has taken the portfolio with her from DBT into the Foreign Office. There is now a Minister focused on this in the Foreign Office. There is a genuine change of atmosphere and indeed intent around what we are doing in this field.

It will include working very strongly with allies because we do not have, for example, the processing capability in the United Kingdom. Supporting those countries that have that capability and trying to edge out China's influence in this field is really critically important.

Q229 **Vicky Ford:** This task and finish report came out last December. Could we ask you to write to us with a list of what the Government have done to implement the recommendations so that we can absolutely see this?

Andrew Bowie: Yes, absolutely.

Q230 **Vicky Ford:** Given what the Prime Minister has said about threats from China, is it right that the UK is still significantly relying on China for so many critical minerals? How are we mitigating that risk?

Andrew Bowie: It is a concern. Through the actions recommended in the report, through the actions already being taken by the Department for Business and Trade and through the mitigations that we are discussing with our partners and allies in the United States, Canada and Europe, we are going to be taking significant action, including working with those countries that have processing capabilities to ensure we are less reliant moving forward on China.

This is not an overnight fix, as you are fully aware, Ms Ford. It will take some time to feed through, but we are fully aware of this. Ben, I do not know whether you want to say anything more in detail about that.

Ben Golding: We are continuing to look at bilateral agreements with lots of countries on exactly this. We already have bilateral partnership agreements with, to give a few examples, South Africa, Canada, Kazakhstan, Australia and Zambia. More are on the way. This is something that is an ongoing effort.

Q231 **Vicky Ford:** Given what the Foreign Affairs Committee said about needing to have a more specific strategy, can you now map different countries by priority, how you are increasing your priority and the relationship with those different countries on each mineral?

Ben Golding: We could maybe write on the detail of different countries, but, yes, we are working through where there are critical supplies of each mineral. That is part of the process of signing those bilateral agreements.

Q232 **Vicky Ford:** Minister, you mentioned Bolivia. I do not know how strong the environmental mining processes are in a country like Bolivia. In the conversation that you have had, what weight do you put on environmental and social values and safety standards in the manufacturing process?

Andrew Bowie: It is huge. That is where British companies and companies from Europe, North America and Australia can add significant value. Their health and safety, certainty of investment and indeed history of success in operating mines across the world lend themselves to doing business in these countries in a far better way than they are being offered by, for example, a company from the People's Republic of China.

Q233 **Vicky Ford:** How do you know whether that "British" company is just registered in the UK but not actually producing any benefits, jobs and so on in the UK?

Andrew Bowie: All these factors are taken into consideration when we engage with the country.

Q234 **Vicky Ford:** I spoke at the beginning about trying to ensure domestic alternatives. Given what the Defence Secretary said just last week about shoring up our security, how are you going to react to what he has said and shore up our security of crucial minerals?

Andrew Bowie: We are very much aware of the situation in which we find ourselves in the world right now. We are very excited by the discovery in Cornwall. DBT is the lead Department. It is engaging extensively with that particular development. When it comes to energy supply, it is very crucially important.

Q235 **Vicky Ford:** If Derek went down there next month, he would hear them saying, "A man or woman from the Department has been down and they are going to help us to process this more quickly and get through some of the bureaucratic barriers." That conversation is going to be happening. Is that right?

Andrew Bowie: I cannot speak for another Department, but I very much hope that they are listening and will be active.

Q236 **Vicky Ford:** Ministers work across Departments.

Andrew Bowie: Yes, indeed.

Vicky Ford: This is the point.

Derek Thomas: I could ask for that meeting.

Andrew Bowie: Just to put your mind at ease, we do work across Departments. As such, myself and the relevant Ministers from DBT and FCDO had a trilateral on this just two weeks ago.

Q237 **Vicky Ford:** In that example, we heard about all sorts of bureaucratic barriers. They were important ones: environmental, climate and so on. I am going to leave with you how you speed it up.

Andrew Bowie: A review of planning and consenting is essential if we are going to deliver even half of the projects that we are seeking to deliver across the country. To give an example not related to critical minerals but related to environmental consenting, to my mind it is absolutely absurd that Sizewell C, for example, have had to complete 40,000 pages of environmental consenting paperwork in order to get the first spade in the ground. That has to change. We have to overcome and reduce the barriers and red tape to deliver some of these projects.

Q238 **Lloyd Russell-Moyle:** You mentioned processing capabilities. One of the things we saw in Cornwall, when it was explained to us, was that the more you process the lithium, the more value there is. While some projects just extract and send it off for processing, the value is not really retained in Cornwall or in Britain. Clearly, we need to develop mineral processing activities here, where the value is added.

Lord Watson was clear in the House of Lords the other day that the UK is probably unique in many countries, in that we do not really have an industrial strategy that is aligned with the development of our needs around new technologies and green energy. Why do the Government not have an industrial strategy that leads on this?

Andrew Bowie: We take the situation regarding critical minerals and the geopolitical situation in which we find ourselves very seriously. We are working with partner countries across the world to help develop the processing capability within those countries that already have an established capability that we can work with and trust.

Q239 **Lloyd Russell-Moyle:** All those other countries that you have mentioned have some form of industrial strategy. That strategy says, "This is how we are going to extract and how we are going to develop and build up our industries. This is how we are going to do it. This is how all the industries can align." We do not. We have chosen to take a different path from almost every other country. Why do we think that path of not having a strategy and not telling people or businesses—

Andrew Bowie: We have a critical minerals strategy, but I hear what you are saying about an industrial strategy.

Q240 **Lloyd Russell-Moyle:** We have a critical minerals strategy for how you are going to secure mineral extraction and secure minerals. Do we have the strategy for how we are going to process those minerals? Do we have a strategy for how we are going to build up capacity to use those minerals? That is the issue. That is where the value is.

Andrew Bowie: As a Government, we see value in supporting those countries with already established processing capabilities to ensure security of supply from trusted partners while supporting those who are, at source, delivering those minerals to those processing capabilities. That is where we see the value added for the UK.

Q241 **Lloyd Russell-Moyle:** The Government do not see a value added in building up processing capabilities for those minerals, which is where the value is.

Andrew Bowie: The UK expertise in mining and delivery at source is where we can add value to the global supply chain.

Q242 **Lloyd Russell-Moyle:** The DBT supply chain strategy is focused on trade and supply chain resilience. Does DESNZ have any plans to produce a domestic supply chain strategy specific to the energy sector?

Ben Golding: We do not have a particular plan announced to produce a supply chain strategy. We are working with industry in each of the key sectors where we feel we have a domestic advantage to understand the supply chain constraints, to understand where there are opportunities to invest and to target investments such as what we have done through the £1.1 billion that we put into GIGA.

Q243 **Lloyd Russell-Moyle:** I do not understand—maybe this is a point, not a question—why we are rejecting the idea of a strategy or the idea that you produce a set of aims that you are trying to reach. Instead, you are taking a very ad hoc approach by saying, "We will discuss with this industry. We will discuss with that company." You are not marshalling any of the activities together. Is that a conscious decision? Do you think you will get more by doing it with an ad hoc approach, or is it just that there is a lack of capability to produce something that every other country has produced?

Andrew Bowie: I would not describe the approach that we are taking as an ad hoc approach. We are absolutely focused on what we need to do when it comes to securing critical minerals—ensuring that we do not become heavily reliant or any more reliant on one country or supplier than another—and on our duty to support those countries that are delivering the key critical minerals, the minerals that are key to delivering our net zero and more energy-secure future.

However, it is in supporting at the source, with the mining capabilities and the tradition of excellence in that field, where we can add value while also supporting those countries with established processing capabilities to ramp those up so we can take advantage of them with our trusted allies across the world.

Q244 **Chair:** Can I turn to the GIGA fund? In the Autumn Statement, £4.5 billion was announced, of which originally £960 million was going to the GIGA fund. That has now been increased to £1.1 billion, which is quite welcome. What are the tangible outcomes in terms of jobs and factories going to be specifically from the GIGA fund?

Andrew Bowie: If we look specifically, £300 million of the GIGA fund has already been directed towards the development of new nuclear fuel capability in the UK, which will see jobs being created.

Q245 **Chair:** Is that fusion?

Andrew Bowie: It is advanced nuclear. It is not fusion. It is for traditional but advanced nuclear fuels, if you understand what I am trying to say.

That money will be directed, along with private capital, towards the increasing of capacity in the UK manufacturing base that has already been established and the creation of jobs in that field. That is one example where GIGA is already delivering tangible benefits to the UK manufacturing base and indeed onshoring some of the expertise and capabilities that we need to see here in the UK.

Q246 **Chair:** It is always great to get more jobs. We all love the opportunities that that presents, but we have an underemployment problem in this country. Where are we going to find the skills and the people to do the jobs?

Andrew Bowie: Skills is the biggest challenge facing us, but it is not just facing us. Just about every country in the world is engaging on a process similar to ours right now. The green jobs taskforce will be delivering its report imminently, I am told. That will set out how we can take advantage of the huge opportunities in terms of reskilling, upskilling and getting people interested in STEM subjects from a very young age.

In the nuclear field, I launched with Min DP—in fact, we are launching officially today, although I am unable to make the official launch—our nuclear skills taskforce. That is working cross-sector, private and public, and with higher education institutions to make it much easier for young people to access opportunities and much more viable for the organisations taking part to deliver those opportunities. It is not just for young people; it is also for those people who are in established energy industries. For example, there are thousands upon thousands of energy workers in the North sea who are seeing the opportunities in oil and gas decrease year on year. Retransitioning those workers and retraining them in the energy of the future, taking the skills that they already have, will be vitally important to this effort.

We are open-eyed and clear-headed about this. It is a huge challenge. Notwithstanding all the other challenges that we have just spoken about today, the one thing that will prevent us delivering these projects will be the lack of skilled labour to build and operate. That is why we are taking action through the green jobs taskforce and indeed the nuclear skills taskforce.

Q247 **Chair:** There has been some criticism of the delay in the announcement of how GIGA funding will be awarded to industry, and in fact some criticism that £1.1 billion is not enough given the challenge ahead. How would you respond to that?

Andrew Bowie: There is always an opportunity to increase budgets. These discussions take place with Treasury on a regular basis as to whether or not there is enough money in the pot. We think that what we have through GIGA—

Q248 **Chair:** You got £1.1 billion. How much did you ask for?

Andrew Bowie: As it is right now, we are very pleased with where we have got to with GIGA. We think it is going to be transformative.

Q249 **Chair:** How much did you ask for? Seriously, Minister, it is a really important point.

Andrew Bowie: I know it is a very important point, Chair, but you will be—

Q250 **Chair:** I am going to press you on this because we need to know how far we are falling behind. You and your Department plan, and you have talked about how much you plan and all the rest of it. You must have a very good idea. This is a really important area. If the Treasury is underperforming, I want to know how much is underperforming by.

Andrew Bowie: The Treasury is absolutely not underperforming.

Chair: You are brilliantly on message.

Andrew Bowie: GIGA will be transformative when it comes to building up the supply chains and the manufacturing base, and attracting investment. In fact, when I engage with investors, they are very pleased with what GIGA is going to be able to do in a very focused and determined way.

Q251 **Chair:** It will de-risk investment for private investors.

Andrew Bowie: Yes, absolutely. It will bring in matched funding from private investors into the United Kingdom to build up exactly what we have been speaking about right here.

Chair: That is also a very important point.

Andrew Bowie: You would not expect me to get into private discussions between Secretaries of State, Treasury and elsewhere.

Q252 **Chair:** Yes, we would. It is a very important point. On this matched funding point, Lloyd Russell-Moyle did raise a very important point about foreign investors coming to the UK. Having been the Minister for Investment, my job back when I was in DIT was to encourage exactly that.

With this GIGA fund, you are suggesting that you put a little bit in and then you get other money coming in. If it is coming in from overseas, that benefits our balance of payments and reduces our current account deficit. It is only £1.1 billion. If it were £2.1 billion, that would be £1 billion less that could go into schools, police or the NHS.

Andrew Bowie: Exactly, yes. The Government have to take a balanced approach to all of this. There are huge pressures, as we know, on the public finances. GIGA is about giving certainty to private investors to come to the United Kingdom knowing that the foundation will be laid and they can invest on top of that. Indeed, when I talk to investors, not just in the City of London but from around the world, they think GIGA is a great model, building on top of our established CfD processes and everything else we have going for us too.

Q253 **Chair:** Again, there has been some criticism that it is slightly strangely targeted. In particular, we miss out on solar and tidal. I asked you about nuclear fusion. As you are aware, I have a non-financial declarable interest in the space energy industry. Is there anything available for things like fusion and the next generation of green energy production?

Andrew Bowie: I cannot get drawn into what may or may not be decided in terms of further iterations of GIGA moving forward. In terms of fusion, we were able to announce a £600 million investment in fusion alone just last year, which was made available by the decision not to reassociate with Euratom. There are other ways of funding. GIGA is not the only thing in town. The Fusion Futures programme is one example of that.

Q254 **Chair:** I have one final question before we come to Derek Thomas. Again, there is an accusation that there is a relatively modest amount of funding for CCUS and the hydrogen sector at £390 million. Are you convinced that the GIGA fund will have a tangible impact on industry within these large infrastructure technologies?

Andrew Bowie: I am absolutely convinced of that and very buoyed by the interest in both those sectors from private finance, which is looking to invest here in the UK.

Chair: You are happy.

Andrew Bowie: Yes.

Q255 **Derek Thomas:** Who in Government, Minister, is responsible for port infrastructure?

Andrew Bowie: That would be the Department for Transport Minister. I believe it is Lord Byron Davies.

Q256 **Derek Thomas:** It is a bit of an unfair question because we have already talked about the problem of cross-Whitehall delivery and making sure you have the tools and environment to deliver what you need to deliver by the right deadlines. We have been told that investment in ports is an important bottleneck in the development of net zero supply chains. What is the Government's plan for port infrastructure and getting it in the right place?

Andrew Bowie: We are seeing huge investment in port infrastructure across the UK. For example, I was at the opening of Aberdeen South Harbour late last year with Her Royal Highness the Princess Royal. That is a private initiative. It was one of the biggest expansions of any port infrastructure in the United Kingdom for about half a century.

Through FLOWMIS, the successful ports at Port Talbot and Cromarty have got significant sums of Government money to increase their capabilities to deliver the floating offshore wind build that we are expecting over the next few years. The Department for Transport is engaging with ports up and down the country in terms of what else we can do to support them to deliver the fixed and floating opportunities that are out there.

Q257 **Derek Thomas:** I am glad you mentioned FLOWMIS and offshore wind. One-off schemes such as those that you have mentioned cannot have a significant impact on port development. I know you have touched on this already, but how do you plan to make sure the ports are ready in time and not just at the tail end of the process of delivering net zero?

Andrew Bowie: Do not get me wrong: the opportunities for British ports to take advantage of the incredible build that we are expecting to see in both fixed and floating are and will be transformative for those ports that are engaging right now with Government and indeed with industry.

FLOWMIS is not the end of the story. FLOWMIS is significantly important, and Port Talbot and Cromarty will be taking full advantage of the money that has been made available to them. However, officials from the Department are engaging with other ports up and down the country—I know the DFT Ministers are as well—to see how other forms of support can be generated, including attracting private and inward investment to port infrastructure around the UK to ensure that ports are in a place to deliver.

On floating specifically, the opportunities are not just for the build domestically here. The export opportunity of having first-mover advantage in developing floating offshore wind will bring huge benefits to the UK economically overall and indeed to the ports that are getting in there right now.

Q258 **Derek Thomas:** I hear that, Minister. I wonder whether the experience on the ground is the same. By the time the CfDs are allocated and the developers are ready to deploy, it is too late to start the work to construct the port infrastructure. You talked about Hinkley Point C and how much work has to be done before anything hit the ground. It is exactly the same, potentially even more so, when you start disturbing the seabed near ports.

How confident can you be? How do you plan on bridging this gap between time and financing and making sure the ports are not almost the afterthought that is struggling to keep up with the need to get to net zero?

Andrew Bowie: I have spoken about FLOWMIS, but we cannot forget OWMIS, which was the precursor to FLOWMIS. We are expecting quite a bit of the infrastructure that was supported through that scheme to be delivered by the end of 2024, or at least to be beginning to be delivered by the end of 2024. This work is ongoing already, Mr Thomas. We are absolutely committed to supporting ports to get ahead of the curve so they can take advantage of the investment.

You are right. A lot of work goes on—I suppose you do not put a spade in the ground at sea—before you drop down to the ocean bed. We need to ensure that our port infrastructure is ready to take advantage of that. Ben, I do not know whether you want to come in.

Ben Golding: To add a little, it is absolutely right that there is a much wider context here than the CfDs. To take two other examples, there is the flexible investment opportunity fund, which is there for freeports in particular. That is £150 million to help them capitalise on investment opportunities. We mentioned earlier the importance of the grid and accelerating connections there. That transmission infrastructure is part of what allows ports to expand. Bringing that forward will help as well.

Q259 **Derek Thomas:** There is definitely room to communicate some of that. I certainly know from Cornwall that all the work we did around FLOW was about getting ports in position and the really difficult task of trying to find any cash whatsoever. I attended a National Infrastructure Commission meeting this morning. It said that it has no responsibility for ports other than a vague connection to energy delivery, for example. We need better communication or maybe even better forward thinking about the role that ports play and the potential for them to be a drag on delivering the key issues that you are so ambitious about today.

Andrew Bowie: Yes, absolutely. I am determined to ensure that they are not. I engage with ports very regularly both in a constituency and ministerial capability so I understand very much the challenges that they face and that they can be the key driver towards success in this field. Mr Thomas, I completely agree.

Q260 **Vicky Ford:** Coming back to critical minerals, why have the Government abandoned the national materials data hub?

Andrew Bowie: I do not know, but I will find out and I will get an answer to you.

Q261 **Vicky Ford:** I thought there was a requirement across each Government Department to help to deliver net zero.

Andrew Bowie: Yes, there is.

Q262 **Vicky Ford:** Is there now a requirement across each Government Department to help to deliver energy security and net zero?

Andrew Bowie: Not as yet, no. We are the lead Department for this, but it is certainly a very good suggestion, Ms Ford.

Vicky Ford: Thank you. We will make that suggestion.

Andrew Bowie: Yes, please do.

Q263 **Vicky Ford:** We have spoken a lot about the difficulties. This national materials data hub was supposed to be helping you to tackle the availability of critical raw materials. We understand that it was dropped a few years ago. We have been told that it would be really helpful. We have also been told that setting recycling targets for critical raw materials would be really helpful. There are very low recycling targets.

Even in your brief, by 2050 over 5,000 wind turbines will have reached the end of their lives. They involve massively critical materials, but some of the earlier wind turbines have already reached the end of their lives. How are you going to ensure that we are recycling materials and not using virgin materials? Are you planning on setting national targets for the recycling of critical materials?

Andrew Bowie: That is a consideration, yes. On your first point about the database, I will engage with my DBT counterpart.

Q264 **Vicky Ford:** You are considering that.

Andrew Bowie: Yes, we are. I will engage with my DBT counterpart and get back to you with a fuller answer on what exactly is going on.

Q265 **Vicky Ford:** Should those targets look at more specific materials that are in shorter supply and at prioritising raw materials so that recyclers have a view of which to prioritise?

Andrew Bowie: Yes, but we are not at the point of developing a policy on this.

Q266 **Vicky Ford:** How quickly can you roll out those recycling targets?

Andrew Bowie: I am unable to give you an answer to that question right now.

Q267 **Vicky Ford:** Will they be binding on local authorities?

Andrew Bowie: Again, we are not quite at that stage yet.

Q268 **Vicky Ford:** We know local authorities only treated recycling seriously when they got penalties under the WEEE directive.

Andrew Bowie: All of these are considerations as we move forward.

Q269 **Vicky Ford:** Would you agree that we should learn from what has worked in the past to encourage local authorities to improve recycling?

Andrew Bowie: Yes, I would absolutely agree with that.

Q270 **Vicky Ford:** That is in terms of both carrots and sticks.

Andrew Bowie: Yes, 100%.

Q271 **Vicky Ford:** On product standards, clearly we want to try to make sure the products we buy are not wasteful in terms of the materials that are used. We have been told that voluntary product standards will not necessarily shift the market. Are you looking at mandatory product standards? We have been told the Government have ruled that out.

Andrew Bowie: I do not think we are.

Ben Golding: I do not think we are. There is a range of product standards that are mandatory in the market through ecodesign, for instance, but we I do not think we are. We might have to write on that point.

Q272 **Vicky Ford:** The summary report, based on the Government's consultation last December, concluded that they will "explore whether there is a role for…MPS…from the late 2020s or early 2030s" but not any earlier. We have been told that in certain products mandatory product standards could really help reduce the overuse of critical products. I suggest you look at that again.

Andrew Bowie: I absolutely commit to doing that.

Q273 **Vicky Ford:** A large majority of respondents said, "Please bring in mandatory product standards."

Andrew Bowie: I commit to looking at that. I also commit to looking at the report that you end up compiling at the end of this and taking away any of the recommendations.

Vicky Ford: A large number of people suggested this. Thank you very much.

Chair: Minister and Mr Golding, thank you very much indeed for coming in front of us for quite a quick session. Thank you very much for your candour.