

Written evidence submitted by Hitachi ABB Power Grids (NZG0009)

Hitachi ABB Power Grids response to the BEIS Committee inquiry into Net Zero Governance

Introducing Hitachi ABB Power Grids

Hitachi ABB Power Grids is an exciting global joint venture founded on two iconic companies with a ground-breaking heritage of innovation in pioneering technologies. As a global technology leader, we serve the energy, industrial, mobility, IT and smart cities sectors. We are a major investor in the UK, with a turnover of £500 million.

Our aim is to bring affordable, clean energy and sustainable living to the world to make it fit for future generations. With a proven track record, global footprint and unparalleled installed base, Hitachi ABB Power Grids balances social, environmental, and economic values. It is committed to powering good for a sustainable energy future, with pioneering and digital technologies.

We strongly believe that the UK can lead the world in creating secure, net zero energy and transport systems through a stronger, smarter, greener grid.

Our response

The Intergovernmental Panel on Climate Change (IPCC) report dispelled any remaining doubt about the need for urgent climate action. We cannot afford to delay. This will require action at all levels of government, and society must be engaged in a way that brings the public and businesses along on that journey. While private sector finance is available, making the UK a globally competitive environment for net zero investment will be paramount to unlock this. We welcome this inquiry, which rightly reflects on the need for clear leadership from government and good governance to ensure we achieve the transition at pace and fairly, whilst capturing the economic benefits.

1. What are the key requirements for a governance structure that can deliver cross-Government climate action at the pace, scale and over the duration required to meet the carbon budgets and the 2050 net zero target?

The government has rightly set highly ambitious targets to achieve decarbonisation. Setting milestones such as Net Zero 2050 are an important component of the energy transition, as they set the overall direction of travel for businesses and consumers. However, Hitachi ABB Power Grids believes that in order to deliver on these targets, we urgently need detailed and specific policies – particularly in light of the sobering report of the IPCC. While government has produced many strategies, the policy detail behind them is often lacking. There is still no clear plan, for example, for the rollout of EV infrastructure, and our business has had difficulty bringing in private finance as a result. There were also significant gaps in the Energy White Paper and the recent Hydrogen Strategy.

We are, to some extent, agnostic on the precise structure of the future system of governance, but the outcome must deliver more prescriptive plans of action and clearer delineation between public and private responsibility. Government should take on the leadership role in this relationship. Delivering Net Zero is a

monumental challenge, it is vastly complex, with a huge number of factors in the ecosystem that need to be aligned, and leaving it to the market alone will not provide a fair, equitable solution. Government is not required to finance Net Zero in its entirety - solutions can be brought in to attract private finance - but the frameworks that make the solutions investible must be in place. Government must work on establishing these mechanisms. One suggestion is, once policy has been agreed, to engage industry experts to support government develop the necessary detail to enable delivery of that policy and produce the deliverables against which governance would be assessed.

a) Are the Government's existing net zero governance structures effective in this role, both in terms of coordination across Whitehall, and coordination with the devolved administrations and local and regional authorities?

Initiatives such as the government's Ten Point Plan for a Green Industrial Revolution are helpful in setting out the government's ambitions in an easily communicable way. Furthermore, the Offshore Transmission Network Review (OTNR) is a good example of how government can effectively coalesce different government bodies and industry on what is a difficult issue. While both of these initiatives were BEIS-led, they were also truly cross-government, bringing in the expertise and authority of various departments to good effect.

However, Hitachi ABB Power Grids does not believe that most current policies allow for effective net zero governance because they do not provide sufficient detail, particularly on issues where it is clear that market forces will not be sufficient to achieve the UK's aims. For example, retrofitting homes with zero carbon heating will take an unacceptable amount of time and may hit the poorest hardest if left to the market alone, due to high consumer costs. There is a payback to conversion, but the timeframe is long, and some consumers will be unable to pay the upfront costs. Private finance institutions are willing to invest in upgrades for a long-term payback, but government needs to facilitate the mechanisms to enable that. Rather than directly financing individual conversions through the Green Homes Grant, government should set up green bonds to allow them to be privately financed across multiple homes. Investors also need the visibility and certainty over a 10-year period to make the investment case. Government needs to reassure the market that goalposts will not change, and for those businesses that build and fit heat pumps, that the market will not disappear altogether. These are the requirements for affordable private sector finance; a detailed, government-led initiative that will be in place for the duration of the transition to ensure it is rapid and equitable.

Local, regional and devolved government will be essential for this and other aspects of reaching net zero, particularly considering the pace that we need to move at, which will demand high levels of efficiency and coordination. Furthermore, many of the Net Zero solutions will be implemented locally and will vary according to each locality. We, like others in the industry, are concerned that local and regional government currently do not have the resources or skillsets required. Taking again the example of heating of homes, retrofitting boilers will require a supply chain with the requisite skillset and national reach to ensure no communities are left behind. One way of addressing this is expanding BEIS' Local Energy Programme, which supports the capabilities of LEPS and local authorities, to increase the availability and capacity of local energy advisors.

b) What alternative governance structures could be established to coordinate and deliver cross-Government action on climate change more effectively?

Our experience of existing government governance structures [Innovate UK] is overly complex and the measures are overly detailed. Industry experts would be able to advise on these structures and to ensure that metrics are established that are appropriate.

However, we are better placed to give our views on the desired outcomes of net zero governance rather than the precise structures. However, we do believe that there is a need for better coordination across Whitehall, which may be aided by the creation of a cross-government 'Net Zero Delivery Unit, or 'COBRA for Climate', to ensure everything departments do is aligned to net zero.

c) What metrics should the Government use to measure their progress towards net zero?'

As with any programme of this magnitude and complexity, there are a series of metrics which can be established at a high, as well as a detailed level.

As well as the obvious overall carbon emissions, additional, specific sectoral metrics would be helpful. For example, the OTNR is underpinned by a clear metric of developing 40GW of offshore wind generation by 2030, against which progress should be regularly measured. We recommend setting clear targets for the investment needed to support important aspects of achieving this, such as upgrading the onshore network. Further metrics that measure the attractiveness of the UK market for the global 'net zero supply chain' would also be helpful to point to any changes that could be made to ensure we are drawing the right businesses and skills.

However, without detailed metrics on the progress of individual investments, there is a significant risk that the high-level objectives would not be met.

Metrics should also aid the understanding of the risks posed by emissions that are difficult to abate in delaying efforts to decarbonise. With pace being key, policymakers and businesses need to be able to understand if we are on track and what the delays are and in which sectors, so appropriate action can be taken.

2. What governance structures would enable HM Treasury to give greater priority to the net zero target and the carbon budgets in its financial and economic decisions?

We would urge HM Treasury to progress the publication of its Net Zero Review and embed its recommendations to enable good governance. This is needed to provide greater clarity on how net zero is to be paid for, where the economic growth opportunities are, where market forces will be insufficient and greater government intervention is necessary, and where specific attention will be needed to deliver a transition that is equitable.

Hitachi ABB Power Grids understands the complexity of policies such as the extension of carbon pricing to more areas of the economy, but we urge the government to proceed at pace to encourage decarbonisation of all areas of the economy. Furthermore, a carbon border adjustment mechanism to address carbon leakage will require international action that must begin urgently to ensure it is in place as quickly as possible.

a) How could HMT better ensure that spending decisions contribute to achieving net zero in the long term?

The government should expedite its proposed changes to the Green Book to elevate the environment further up the list of considerations when evaluating cases for new projects. The government committed in its Green Book Review final report (Nov 2020) to an expert review into the application of the discount rate for environmental impacts, which would see them afforded the same importance as life and health. We would urge the findings of this review to come forward and be implemented as soon as possible, so sufficient value is placed on projects that reduce carbon emissions. Government should present a tangible measure of valuing decarbonisation, taking into account climate mitigation cost reduction, long term benefit to the consumer, and personal health benefits. These should be considered against the cost of any investment.

More fundamentally, however, the whole balance of taxation and energy costs needs to be considered holistically to reflect the changes in consumption and to create a level playing field for energy pricing. One example of this is the need to change the way vehicle use is taxed as we move away from the internal combustion engine and fuel duty revenues fall. Currently, VAT is charged for use of public chargers, but not on chargers at homes for (single proprietary) business use. This risks disincentivising EV uptake and inequitably treating those without access to chargers at home or at their workplace, and by incentivising people to charge at home, thereby putting more pressure on an already overloaded electricity grid, it could also have the unintended consequence of increasing overall network costs, which in turn would lead to increases in domestic energy bills. This emphasises the need for these cross-cutting fiscal changes to be thought about holistically.

Currently, energy costs are regulated in a way that prioritises consumer bills over everything else. This may need to be rethought to allow for the significant upfront investment needed to support the transition. Furthermore, consumers who can afford to make upfront investments, such as in EVs, will stand to benefit economically from new technologies, with those who cannot being left behind. This may need to be addressed through a redistributive mechanism to ensure an equitable transition. Again, the publication of the Net Zero Review will help guide the government's approach to this.

3. What signals and support does business need from the Government in order to deliver cross-economy decarbonisation in line with the carbon budgets and the net zero target? What delivery function should Government provide itself and are relevant regulatory bodies mandated and resourced effectively to deliver on Government priorities?

Above all, business needs long term visibility (i.e. longer than 10 years) on the government's ambitions and detailed plans. These plans need to be clear at all levels of government, right down to the city level. Crucially, these plans need to be backed up by ensuring the UK remains an attractive market for international investors through sending positive economic signals, so the transition can be efficiently achieved and significant economic opportunities captured. Creating this optimum environment is one of the government's key responsibilities.

An intervention the government could consider is changing the shape of local markets to provide greater investment certainty. For example, local bus companies could be contractually mandated to only use the charging infrastructure of one provider, thus giving that provider the revenue guarantees they need to create a business case for investment in a town or city. Government needs to find the right balance between stimulating competition and providing an attractive private sector investment environment with certainty of future revenues.

a) How do policy and regulatory signals and support vary between Government Departments (and how have they varied over time)? How is this affecting business activity on climate change?

Every change from government affects business confidence about the future direction of policy. For example, the scrapping of the Green Homes Grant came as a surprise to many in the industry. Last minute changes such as this one are not helpful. An example of a successful approach is the Contracts for Difference (CfDs) scheme, that has given clarity over an extended period and therefore attracted inward investment and scaled up offshore wind capacity.

Furthermore, there seems to be a disconnect between the scale of ambition being shown by Number 10 and BEIS and the level of funding committed by HMT across several key areas. For instance, the cut and changes to eligibility of the EV grant in March this year sent a potentially confusing signal to consumers and industry, at a time when encouraging uptake of electric vehicles is critical to decarbonising one of the highest polluting sectors.

b) Should Ofgem play a greater role in delivering on net zero and, if so, what changes are required to deliver this?

Yes, we agree that Ofgem should play (and is playing) a greater role in delivering net zero. This remit should be extended to ensure the optimum investment environment is created. However, if Ofgem is to perform this function as effectively as possible and make decisions at a speed that is reflective of the urgency needed, it must be resourced appropriately.

Additionally, we recommend revisiting how 'least regret' is defined, which currently puts the greatest emphasis on minimising capital costs. It should also reflect the climate and financial risks of delaying initiatives that cut carbon usage.

4. The BEIS Committee will be working with the Environmental Audit Committee on this inquiry and inviting guests from other select committees. We are also interested in comments on the effectiveness of current parliamentary scrutiny arrangements for climate change and proposals to improve this.

N/A

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