

# Hitachi Energy's Response to Ofgem call for Input: Future of local energy institutions and governance

## Strategic energy context

*This section sets out the strategic energy context for our review of institutional and governance arrangements. It sets out the energy system functions needed at a sub-national level to deliver the net zero transition and outlines a set of criteria that Ofgem consider necessary to be met for these functions to be delivered effectively.*

**Question 1 - Are the three energy system functions we outline (energy system planning, market facilitation of flexible resources and real time operation of local energy networks) the ones we should be focusing on to address the energy system changes we outline?**

We agree with the proposed three energy system functions identified for prioritisation in order to deliver the desired energy system changes. Additionally, to deliver net zero it will be essential for government, the regulator and the private sector to work in partnership in order to set expectations, shape policy and regulatory frameworks. This coordinated and collaborative approach will be critical in ensuring that energy system functions at the sub-national level enable the right level of investment to be directed, in the right places, at the pace required to meet the UK's net zero targets.

We also believe that during the development of local energy plans, a wider "whole systems" approach needs to be taken. When determining local energy plans, consideration should be given to local transport planning, as the electrification of transport will be a major energy consumer. How to include transport sector expertise and integrate it into local energy plans, so as to accelerate the decarbonisation of transport.

**Question 2 - Do you agree with the criteria we have set out for assessing the effectiveness of institutional and governance arrangements?**

We agree with the criteria proposed. Moving forward, in the short-term we believe the government and regulator should consider what policy levers need to be developed in order to correct the direction of travel as time passes – should this become necessary – in order to future-proof the effectiveness of the proposed institutional and governance arrangements. Whilst we believe the criteria for assessment are correct, further details are required in order to ensure the required pace of delivery is met.

## Strategic case for change

*This section sets out Ofgem's view of the suitability of current and planned institutional and governance arrangements and the key opportunities and risks associated with change*

**Question 3 - Do you agree with our assessment of how far the current institutional arrangements are, or are not, well suited to deliver the three key energy system functions?**

We believe that in order for the ambition stated in the 'Net Zero Strategy: Build Back Greener' to be delivered within desired timescales, there is a need for government to come forward with greater detail of its proposals for enabling and supporting the market to deliver on these ambitions. For example, there is a gap between the welcome ambition of delivering 600,000 heat pumps per year by 2025 and the present capability of the industry to deliver on this target. We believe that Distribution Network Operators (DNOs) have a clear role to play in enabling the accelerated decarbonisation of heat.

In the current market, the cost of a DNO connection has and continues to be a barrier in the rollout of heat pumps, which comes as a consequence of the way DNO's are regulated and the rules they have implemented to adhere to such regulations. In order for local energy plans to be effective in supporting UK Government ambitions around heat pumps, these plans need to have the flexibility to allow DNOs to make these connections in a timely manner and in a way that is financially viable.

**Question 4** - Overall, what do you consider the biggest blocker to the realisation of effective energy system planning and operation at sub-national level?

The development of Local Area Energy Plans (LAEP) is a complex exercise that needs to integrate the local energy networks, transport systems, industrial users etc. The ownership of the process, skills and capacity to deliver plans at local level do largely not exist across the UK. Clarity on who is responsible for ensuring plans are delivered, (most likely local / regional authorities), and appropriate skills and resources to support those responsible need to be in place to develop the initial plans.

A prime blocker for implementing the plans is investment. Developing plans that can attract private investment will be crucial to enabling the accelerated investment in infrastructure and digitalisation of energy systems. The assessment of what is allowable as economic investment must recognise the necessity of digital investment in particular and the value of future flexibility, rather than just capital cost.

We believe it will be imperative for DNOs to invest in the latest IT systems and network management capabilities to ensure effective operation of local energy networks. Significant investment is required in real time data systems at the low voltage level, which will enable increased effectiveness in the real-time operation of local energy systems. This investment in digital will provide DNOs with better data in real time, making them able to make more intelligent decisions.

Whilst we are in alignment with Ofgem in its encouragement of the market to invest in digitalised systems, to encourage and support DNOs in making these necessary investments, it will be crucial for Ofgem to share best practice and benchmarks for their adoption. We would also urge Ofgem to be more specific about what beneficial data is required for the effective operation of the energy system.

**Question 5** - Do you agree with the opportunities of change we outline and the potential benefits they may create?

Whilst we principally agree with the identified opportunities and their associated potential benefits, we believe there is a need for government to come forward with greater detail on these benefits.

**Question 6** - Are there additional opportunities for change and benefits that we have not set out?

No response

**Question 7** – We set out a number of risks associated with change. Do you agree with these risks and the potential costs they create? Are there additional risks of change and costs that have not been set out?

The risks set out do represent a good assessment of the situation. However, as set out in the introduction the greatest risk is in not changing the arrangements for local energy planning as the current arrangements are not supporting decarbonisation with sufficient pace.

### ***Framework model options for enduring arrangements***

*This section sets out four distinct, high level framework models for enduring institutional arrangements. This section includes a high level description of each framework model, its key features and how it seeks to address the issues raised in relation to existing arrangements.*

**Question 8** - For each model, we have set out the key assumptions which need to be true for the model to offer the right solution. Which of these assumptions do you agree with?

We recognise that the range of models proposed all have advantages and disadvantages and we are not in a position to comment on the ideal balance, The comment we would make would be the overriding need to have firstly a plan and secondly operations that are truly integrated and coordinated across all elements of the energy system and the major consumers of energy such as transport and industry.

**Question 9** - Out of the framework models we have developed which, if any, offer the most advantages compared to the status quo? If you believe there is another, better model please propose it.

No comment

**Question 10** - What do you consider to be the biggest implementation challenges we should focus on mitigating?

Whichever model is selected there will be a broad range of new functions required alongside a raft of coordination activities – the skills and resources required to successfully execute these new functions will be a key challenge.

Another challenge will be in ensuring that the final system remains attractive enough to ensure the significant level of private investment that will be required to deliver the energy transition. The wider context of other global markets competing for energy investment should not be underestimated.

The final area we would focus on is ensuring coordination between all of the parties involved. Effective coordination across all parts of UK, which ensures shared learning, the adoption of standard approaches etc. will all be required to accelerate and reduce overall implementation costs at the whole system level.

**Question 11** - Taking into account the varying degrees of separation of DSO roles from DNOs under framework model 1, do you consider there are additional measures we should consider implementing, in particular in the short term (e.g. changes in accountability etc)?

No Comment

**Question 12** - Are there other key changes taking place in the energy sector which we have not identified and should take account of?

No comment

### **Next steps**

*This section sets out the next steps for this Call for Input and the work on future of local energy institutions and governance, including plans for engaging with stakeholders over the course of the year.*

**Question 13** - What do you consider to be the most important interactions which should drive our project timelines?

No comment