Response to Public Bill Committee: GB Energy Bill

October 2024

VEOLIA

1. **Introduction**

2. Thank you for the opportunity to contribute towards the development of the Great British Energy Bill. Veolia is the UK's leading environmental services organisation, home to 14,000 green jobs in the UK alone. Being a multinational organisation, we have expertise and insights as to how various governments have created pathways to net zero.
   Our services span renewable energy generation and storage, water and wastewater service, waste management and recycling. Collectively, they interlock to help achieve ambitious net zero targets. We believe it is essential that the complex challenges between them are considered holistically for GB energy to be a success.
   Veolia is the only UK organisation unique enough to provide an end to end vision for safeguarding our planet's limited resources.

3. In the last year alone:
   a. We achieved 465 million municipal and commercial collections and processed 55k tonnes of plastic at our plastic recovery facility.
   b. We provided 1.8m people with water under municipal contracts.
   c. In addition to our base of over 560 MW of renewable and low carbon electricity, we generated 1.8 GWh of electricity at Seafield WWTW via additional biogas production, turning the site into a net exporter.

4. The UK has made substantial progress in delivering low carbon generation over recent years, supported by government intervention to reduce costs to industry for expensive technologies. This progress is evident in the significant increase in renewable energy capacity and in meeting carbon budgets.

5. However, there is still considerable progress to be made. In achieving net zero, there is consensus that this should be done in an approach that keeps bills low for consumers and industry while also ensuring security - a 'Just Transition'.

6. Importantly and similarly to what other industry colleagues such as the CCSA have outlined in their written response and as reflected in commentary from other witnesses during the committee stage debate, providing certainty and developing definitions is vital.
   a. Along with others, we need to see conviction from GB Energy that it will support the breadth of low carbon technologies. Specifically, energy from waste and the development of heat networks. We recognise that GB Energy has to prioritise. However, it should do so on the basis of recognising proven, reliable, low carbon sources.
   b. In recent weeks we have heard from senior leaders across public institutions such as the National Energy System Operator. They are helpfully beginning to define ‘clean power’. Mission control along with GB Energy need to take the next step of defining the mix within that and define what enables that transition. This includes the likes of defining green jobs.
   c. GB Energy needs to carefully create an environment that crowds-in investment. £8.3bn of investment is welcome. The transition will need significant amounts more, the vast majority of which will need to be private finance. Stable and clear definitions as we highlight above is an

important step in creating the confidence to invest in a low carbon future.

7. Given these considerations, we have grouped our views into three categories:

8. <u>Increasing low carbon deployment</u>

9. Within the Great British Energy Bill, we noted there is provision around the role GB Energy will have for accounting for security of supply. Beyond this though, industry would benefit from the committee gaining an understanding of what different low carbon technologies will be prioritised within the UK's generation mix to support that claimed security. This clarity is crucial for long-term planning and investment decisions across the energy sector for low carbon generators such as ourselves.

10. For example, Veolia is a leader in energy from waste. This generation capacity is not only vital to improving the UK's energy security, it is low carbon and is one of few technologies that has a substantial benefit to delivering a circular economy.

11. GB Energy should enable a variety of technologies to be supported. Recent years have seen a domination of wind and solar as the prioritised technologies supported by the government through the likes of the Contracts for Difference (CfD) scheme. We would welcome the CfD being expanded to consider other technologies that are accepted for repowering.
    While these technologies have played a crucial role in decarbonising the UK's energy supply, a more diverse approach is necessary to ensure a resilient and flexible energy system. GB Energy will have an opportunity to support technologies such as heat networks and beccs.

12. As stated earlier in our submission, we look to take a holistic view of net zero, beyond just the 2030 clean power target. With that perspective, we believe the Bill will also need to deliver on nature and circular economies.
    Accepting that clean power by 2030 is a primary target, it must not be forgotten that some forms of generation have qualities better suited to achieving objectives relating to the government's broader ambitions.
    As highlighted in point 9, Energy from Waste not only provides low-carbon electricity but also addresses waste management challenges, contributing to a circular economy. GB Energy should, within it's principles, take steps to support the circular economy, recognising that net zero is not just about clean power 2030.

13. To further enhance the UK's low carbon deployment capability, we would implore the committee to consider the following when assessing the bill:
    a. Technology agnostic: While wind and solar have been instrumental in the UK's low-carbon transition, the Bill should encourage a broader range of technologies. We have reflected similar considerations into our response to the government's recent REMA consultation.
    b. Energy Storage: The Bill should prioritise the development and deployment of various energy storage technologies to complement intermittent renewables. This could include pumped hydro storage and batteries.
    c. Grid Flexibility: Investments in flex services that support demand-side response should be encouraged to enable the grid to manage increasing amounts of renewables.
    d. Circular economy integration: The Bill should explicitly recognise and support technologies that contribute to circular economy principles. This includes the likes of Energy from Waste and the use of biogas from anaerobic digestion. Similarly, the recycling of materials used in renewable energy technologies should be considered to make the sector more energy and resource

efficient.
e. Nature-based solutions: The Bill should promote nature-based approaches to carbon sequestration given the benefits we have demonstrated it can provide to ecosystem services.
f. Green skills: To ensure a just transition, the Bill should include measures to support skills development and retraining programmes for workers coming from carbon-intensive industries.

14. <u>Delivering local loops of energy</u>

15. We've reflected on the programmes that regional energy planning is a part of and have welcomed Labour's commitment to ensure that local energy is a priority.
16. With that in mind, we believe that the Great British Energy Bill should explicitly encourage and facilitate the development of local loops of energy. For example, district heating.
17. District heating has significant growth potential. We support the government's ambition to ensure that 20% of heat is provided through heat networks by 2050. This is an achievable target if regulatory frameworks and institutions work collaboratively. GB Energy will need to recognise and support the delivery of heat networks through target investment that supports high quality projects.
18. Local loops offer numerous benefits that align with the bill's objectives and can significantly contribute to the UK's energy transition:
    a. Reduced transmission losses: By generating electricity closer to the point of consumption, embedded generation significantly reduces transmission losses, improving overall system efficiency. Local energy loops can dramatically reduce these losses, leading to a more efficient use of resources and lower overall energy demand.
    b. Community Engagement: Embedded generation fosters local involvement in energy production, increasing awareness and promoting responsible energy consumption. We have varied programmes at Veolia that help develop and educate communities on the value LLE provides. This grassroots approach can accelerate the UK's energy transition and build public support for clean energy initiatives.
    c. Increased renewable integration: Local energy loops can more easily incorporate small-scale renewable energy sources, supporting the UK's clean energy targets and reduce emissions. We have regularly demonstrated that the likes of district heating and small scale renewables can be seamlessly integrated into local networks, providing clean energy and contributing to the UK's net zero ambitions.
    d. Grid stability: Local loops can help balance local demand and supply, reducing strain on the grid and the need for expensive peaking plants. This can lead to significant cost savings in the long term and improve the overall reliability of the energy system.
    e. Economic Benefits: Local loops can stimulate local economies, create jobs, and keep energy spending within communities. When we've developed LLE, it has provided employment opportunities and skills development in areas that may be struggling economically.

19. Given these benefits, we would expect GB energy (and therefore the Bill) to prioritise or at least facilitate embedded generation. To do this, clear frameworks that simplify planning processes for community energy and ensure funding also flows to supporting small scale technologies.

20. We consider these measures to be supportive and aligned to the development of local area energy plans and a clear demonstration that local loops contribute towards energy security.

21. <u>Supporting consumers</u>

22. Affordability is crucial for a just energy transition. Local low carbon solutions can achieve this as we have demonstrated through our work as set out above.
23. We believe it's important for the GB energy bill to emphasise cost reduction for consumers through

various pathways:

a. Planning: Prioritise investments where planning is agreed and ensure that cost-effective technologies and infrastructure that deliver the best value for consumers are not blocked by planning regulations.
b. Flexibility: Promote energy efficiency and demand response programmes to reduce overall system costs. Enabling flex services to be widely adopted will improve energy management and reduce the total demand on the system, leading to lower costs.
c. Long-term planning: We need to see the development of strategies that are not based on short term goals. A stable policy environment will enable the likes of Veolia to plan for long-term investments in clean energy infrastructure. This will help reduce the likes of risk premiums which will ultimately reduce consumer costs..
d. Local loops of energy: Again, supporting the development of local level infrastructure can reduce the need for expensive grid reinforcements and allow consumers to benefit from locally generated renewable energy.
e. Research: Allocate funding for research programmes into technologies that will support industries decarbonise at pace, for example, breakthrough energy storage solutions.

24. Based on the above, we would support the committee in calling for the GB energy bill to take a clearer approach to supporting cost-effective solutions. Having well established responsibilities amongst the varied actors in the clean power mission will help achieve this goal.

25. **Conclusion**

26. By focusing on these three areas, the Great British Energy Bill can create a more affordable energy system that supports the UK's transition to clean energy while providing local energy with community benefits. By balancing the need for local energy solutions with a strong focus on communities, affordability and low carbon generation, the UK can lead the way in creating a sustainable, resilient energy system. We urge the committee to consider these recommendations for them to be reflected in the bill.