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APPENDIX – DELIVERY OF YOUR 100-DAY PLAN

This appendix provides additional context on how Green GEN Cymru's projects and wider approach can support the delivery of your Programme for Government, particularly in relation to energy system development and infrastructure delivery. It sets out our perspective on the key system constraints, delivery challenges, and investment requirements that will shape Wales's ability to meet its renewable energy ambitions, alongside practical considerations for ensuring that policy objectives can be translated into deliverable outcomes. We hope this material is helpful in informing the development of a National Energy Strategy and wider policy proposals.

Policy position: "Immediately prohibit the use of large steel lattice pylons for new 11-132 kV lines in Wales, with a clear presumption in favour of undergrounding and overhead alternatives permitted only where installation is via low wooden poles or equivalent, less intrusive infrastructure":

We note the proposed policy direction in relation to steel lattice overhead line design and associated infrastructure standards. As referenced in the main body of our letter, we have set out our initial considerations on how this may interact with project design, cost, deliverability, and environmental outcomes. We look forward to discussing this in more detail at a forthcoming meeting, including how design choices can best balance visual impact, engineering resilience, system efficiency, and long-term maintainability.

Policy position: "As an immediate priority in government, we will develop a National Energy Strategy, mapping Wales's current and future energy needs and setting out a clear, long-term plan for the infrastructure required to meet them. This will provide greater certainty for developers and communities alike, identify where new infrastructure is needed, and ensure Wales makes the most of emerging green technologies, including green hydrogen":

We support the commitment to publish a comprehensive National Energy Strategy within the first 100 days of your new Government. This represents an important opportunity to set a coherent, long-term framework for Wales's energy system. To be credible and investable, the strategy must be grounded in a clear understanding of system constraints, delivery pathways, and infrastructure realities. We would welcome the opportunity to contribute evidence on the central role of grid capacity and timely connections as the critical determinant of whether generation targets can be achieved - including current constraints in the connection queue, geographic bottlenecks in network capacity, and the sequencing challenges that affect when projects can realistically be delivered. Providing clarity on how these constraints will be addressed, including through connection reform and targeted network reinforcement, will be critical to translating ambition into delivery.

However, it is also important to emphasise that delivery activity is already underway. We are actively engaged with the National Energy System Operator and wider network stakeholders to progress our projects at pace within the existing framework, and our

investment programme is already committed to delivery timescales that cannot be contingent on the conclusion of future reform processes. Ensuring that strategy and reform activity supports, rather than delays, near-term delivery will therefore be critical to maintaining momentum and investor confidence.

Recent analysis highlights the scale of the challenge facing Wales's energy system. Wales has historically been a net exporter of electricity, with net exports exceeding 21 TWh in 2016. However, this position has steadily eroded, with exports falling to near zero by 2024 and Wales becoming a net importer of electricity for the first time in 2025.

At the same time, overall electricity generation in Wales has declined significantly, with output falling by almost 50% from its 2016 peak. This reflects the rapid closure of coal and nuclear capacity, which has not yet been matched by the pace of renewable deployment. As a result, gas now accounts for around 58% of electricity generation in Wales - a higher share than in any other UK nation - increasing exposure to volatile international energy markets and associated price shocks.

While renewable generation in Wales has grown substantially over the longer term, now meeting approximately one third of electricity demand, progress has slowed in recent years. Without a significant acceleration in deployment, there is a risk that renewable generation will not keep pace with rising demand, particularly as electricity consumption is expected to increase substantially through the electrification of heat, transport, and industry.

Our analysis shows that network constraints and curtailment are already adding significant costs to the electricity system, with constraint payments reaching hundreds of millions of pounds annually. These costs arise when low-cost renewable generation cannot be used due to insufficient network capacity, requiring more expensive generation to be dispatched instead.

Evidence shows that when low-cost renewable generation is unable to connect or is curtailed due to network constraints, the system must rely more heavily on higher-cost generation, particularly gas. This increases wholesale price volatility and exposes consumers to international energy price shocks. Addressing grid constraints and accelerating connections is therefore one of the most direct ways to reduce electricity costs and improve energy security over the long term.

It will also be essential that the strategy adopts a genuinely whole-system approach, integrating generation, storage, demand, and network infrastructure planning rather than treating these elements in isolation. This is particularly important in the context of growing electricity demand from electrification of heat, transport, and industry, which will materially increase pressure on network capacity over the coming decade. This reinforces the need for coordinated, forward-looking network investment that anticipates demand growth rather than reacting to it. However, while coordination and strategic alignment are important, it is also essential that delivery is not held back pending the conclusion of wider system planning or reform processes. Progress on project development and infrastructure delivery is already required within current policy and regulatory frameworks, and continued momentum will be critical to meeting near-term decarbonisation and investment objectives.

Policy position: "We will ensure that planning regulations better facilitate the green transition, including through firmer consenting timelines for renewable energy projects and permitted development rights for heat pumps, household solar and other small-scale renewables":

Wales now has a modern, unified consenting framework through the Infrastructure (Wales) Act, with the Infrastructure Consent Order (ICO) regime providing a clear end-to-end process for the determination of significant infrastructure projects. The Act establishes defined stages, statutory timescales, and a single decision-maker in Welsh Ministers. In procedural terms, the system is therefore already capable of supporting timely and predictable decision-making for major energy and grid infrastructure – and therefore facilitating the green transition.

There is no need for further structural reform of the consenting process itself. The priority should be to activate and operate the regime as intended, rather than to revisit its design. Introducing additional procedural change at this stage would risk unnecessary disruption, uncertainty for live projects, and loss of momentum at a critical point for infrastructure delivery.

In practice, the key determinant of whether firmer consenting timelines can be achieved will not be further legislative change, but effective resourcing and deployment of the regime. The ICO process depends on the capacity of Welsh Government, the examination function, and statutory consultees to engage promptly and consistently throughout pre-application, examination and decision-making. Ensuring that these bodies are adequately resourced is therefore essential if the statutory timescales set out in the Act are to translate into real-world delivery outcomes.

Alongside process and procedure, the policy context within which ICO decisions are taken is critical to achieving speed and certainty. Experience consistently shows that examination and determination are more efficient where national policy is clear, up to date and explicit about need, principle and spatial priorities.

There is a clear opportunity to build on Future Wales: The National Plan 2040 to provide this clarity, particularly in relation to the spatial and strategic requirements of electricity grid and energy infrastructure. A stronger national policy framework would reduce uncertainty at examination, narrow the scope of debate, and support more focused and proportionate consideration of impacts.

Furthermore, there is an opportunity to make early and proactive use of the Infrastructure (Wales) Act's provisions to develop and adopt national policy statements or equivalent policy instruments for infrastructure. Doing so would allow policy clarity to be strengthened quickly, without waiting for a full review of the national development framework. Strengthening the Government's position on the need for new network infrastructure in Wales in a national policy statement would provide clearer signals to developers, planning authorities, and communities on where strategic investment is most needed, and support more coordinated delivery across generation and network assets.

Policy position: "Develop and maintain a clear understanding of the evolving needs of the Welsh economy, supporting Welsh businesses to respond to new

challenges and opportunities – including in growth sectors like renewables and green technology":

We also note the proposed setting of explicit generation targets by technology, including wind, solar, tidal, and emerging technologies such as hydrogen. We support the value of clear direction but would emphasise that technology-specific targets must be grounded in realistic deployment rates and aligned with network capacity and system flexibility. Without this alignment, there is a risk of over-ambition without delivery mechanisms, particularly where grid reinforcement and consenting timelines become binding constraints. This is especially important given the differing maturity and delivery timelines of technologies, with established technologies such as onshore wind capable of rapid deployment, while others will require longer-term development and supporting infrastructure. Ensuring that targets are supported by clear spatial planning and grid investment strategies will be essential to avoid disconnects between ambition and deliverability.

Cost comparisons consistently show that technologies such as onshore wind and solar offer the lowest-cost pathways for new electricity generation. However, these cost advantages are only realised if projects can connect and operate efficiently. Without sufficient grid capacity and coordinated infrastructure planning, there is a risk that the lowest-cost generation options are delayed, leading to higher overall system costs despite strong renewable resource potential.

Policy position: "A new Renewable Energy Sector Deal will coordinate action between government, the renewables industry, further and higher education, communities and trade unions, while providing clearer planning requirements and firm, predictable consenting timelines for renewable energy projects":

We strongly support the development of a Renewable Energy Sector Deal as part of the wider strategy, building on the agreement established with the previous Welsh Government and industry, which already provides an important foundation for structured collaboration between government, industry, and communities. We see real value in retaining the core principles of that approach, particularly its emphasis on partnership working, skills development, supply chain growth, and coordinated sector planning, all of which remain essential to accelerating Wales's renewable energy ambitions. Maintaining continuity with this existing framework will be important in sustaining investor confidence and avoiding disruption to project pipelines already in development. This continuity will be particularly important given the long development timelines associated with energy infrastructure and the need to maintain momentum across existing projects.

Our cost of electricity analysis reinforces that network infrastructure should be considered a core component of affordability policy. While renewable generation reduces wholesale prices, inefficient system integration can result in rising network and balancing costs that offset these savings. A strengthened sector deal that explicitly links generation deployment with network investment and system efficiency would help ensure that the cost benefits of renewables are fully realised by consumers.

There is an opportunity to build on the existing framework by ensuring it is closely aligned with delivery realities and system constraints. In particular, ensuring that grid infrastructure is fully integrated into energy and economic planning will be critical to

successful delivery. Without sufficient network capacity and timely connections, there is a material risk that generation projects will be delayed or unable to proceed, regardless of policy ambition. This highlights the importance of embedding grid infrastructure planning at the heart of economic and energy policy, rather than treating it as a secondary consideration.

There is also scoped to further enhance the focus on creating a genuinely coordinated and investable pipeline of projects, underpinned by clearer delivery sequencing, stronger integration with planning and consenting processes, and more explicit alignment between generation ambition and network capacity. A clearer, spatially defined pipeline would also help reduce cumulative environmental and planning impacts by enabling more coordinated development. A more clearly defined and sequenced pipeline would also support supply chain investment, workforce planning, and more efficient allocation of capital across the sector. It would also support more effective engagement with supply chains and help address emerging workforce and skills constraints.

Proudly based in Wales, and employing colleagues from across the country, we bring a strong understanding of the local, regional, and national context in which this transition must be delivered. In that context, we would welcome the opportunity to act as a delivery partner within this refreshed framework, supporting system coordination, technical input, and cross-sector alignment. In doing so, we believe we can help build on the existing sector deal architecture while strengthening its practical delivery focus and ensuring it is fully aligned with the infrastructure requirements of Wales's energy transition. This could include providing data on project pipelines and connection demand, supporting spatial planning, and helping to coordinate delivery across developers, communities, and system operators. This could also support improved transparency around project pipelines and infrastructure requirements, helping to build community confidence and social licence.

We note your ambitions around planning regulations and spatial planning. From a delivery perspective, predictability and consistency are critical. Clear and enforceable consenting timelines for both generation and network infrastructure help reduce uncertainty and unlock investment, provided they are matched with sufficient resourcing and coordination across planning authorities.

In this context, our focus is on ensuring that the new Infrastructure Consenting Order (ICO) regime operates in a way that provides genuine certainty for infrastructure delivery with a clear expectation of timely decision-making and minimal scope for avoidable delay. This regime is generally considered to be 'fit for purpose' for infrastructure applications, albeit there is considered value in targeted refinements to strengthen delivery certainty further.

Reducing variability in decision-making timelines and ensuring consistent application across regions is particularly important in avoiding bottlenecks and maintaining delivery momentum.

As noted above, a key opportunity is within the IWA is that it allows Welsh Ministers to designate policy as an Infrastructure Policy Statement for the purposes of determining ICO applications, including grid and renewable infrastructure. This could establish the national need for electricity network infrastructure, and the criteria for its

development, which would ensure that ICO examinations can focus on delivery and impacts rather than repeatedly revisiting questions of strategic justification. This approach would provide greater certainty for communities and developers, and more timely decision-making, fully in line with the intent of the IWA.

Ensuring that planning is aligned with infrastructure delivery timelines, and does not introduce additional layers of complexity, will be critical to its success. Delays in planning and consenting processes have a direct impact on electricity costs. Where low-cost renewable and network infrastructure projects are delayed, the system continues to rely on more expensive generation for longer, increasing cumulative costs to consumers. Greater predictability and speed in planning decisions can therefore play an important role in reducing long-term energy costs, as well as improving investor confidence.

Policy position: "A Wales Wealth Fund, capturing a fair share of profits from Welsh renewables to invest in community-led projects in areas like housing and energy":

We also note the intention to develop a Wales Wealth Fund capturing value from renewable energy to reinvest in communities. We support the principle of ensuring that Wales retains greater value from its natural resources. Renewable and grid infrastructure projects are typically capital-intensive with long payback periods, and additional cost burdens or uncertainty can directly affect investment decisions and project viability. Clear, consistent, and proportionate frameworks will be essential to ensuring that Wales remains an attractive destination for long-term energy investment. Consistency with wider UK policy and avoidance of overlapping or duplicative requirements will also be important in maintaining competitiveness. It will also be important to consider how this mechanism interacts with other policy requirements, including community benefit and ownership models, to avoid unintended cumulative impacts on project viability.

It will also be important to recognise that the overall affordability of electricity is shaped not just by generation costs, but by total system costs, including network investment and system operation. Policies that increase upfront costs or introduce uncertainty into infrastructure delivery risk increasing the cost of capital and, ultimately, the cost of electricity to consumers.

Policy position: "Establish a Just Transition Board to guide net zero strategy – bringing together relevant experts and ensuring key stakeholders have a meaningful role in shaping policy":

Finally, we would highlight the importance of ensuring that cross-cutting governance structures, including any Just Transition Board or strengthened sustainability duties, maintain a strong focus on delivery outcomes as well as policy ambition. A coordinated approach across government portfolios will be essential to avoid fragmentation and ensure that energy, infrastructure, planning, and economic development objectives are aligned in practice. It will be important to avoid the creation of additional layers of process or approval that could unintentionally slow project delivery. Clear accountability and streamlined decision-making processes will be essential to ensuring that these structures support, rather than hinder, delivery.

Other areas of policy to note:

In addition to the points above, there are several areas of policy where we would continue to engage through our discussions with your government and through relevant industry forums and representative bodies. These include the practical design and scalability of community energy and local ownership models, particularly in relation to grid access, project viability, and integration with wider system planning. In particular, ensuring that community ownership or benefit requirements remain flexible and do not unintentionally create barriers to project financing or delivery will be critical. A flexible approach that allows for a range of delivery models will help ensure that community benefits are realised without slowing deployment.

We also anticipate ongoing engagement on the development of climate and nature recovery frameworks, including how environmental governance structures are implemented in practice and how these interact with infrastructure consenting and delivery timelines. A balanced approach will be needed to ensure that environmental ambition is delivered alongside, rather than at the expense of, timely infrastructure deployment. This includes ensuring that environmental and planning frameworks are proportionate, clearly defined, and aligned with delivery timelines.

In summary, we believe Wales has a significant opportunity to accelerate its transition to a secure, affordable, and low-carbon energy system, but doing so will require a clear and sustained focus on deliverability. This includes aligning policy ambition with infrastructure delivery, ensuring timely investment in grid capacity, and maintaining momentum on projects already in development. Green GEN Cymru stands ready to work in partnership with the Welsh Government and wider stakeholders to support this effort - bringing forward projects at pace, contributing evidence and technical expertise, and helping to ensure that strategic ambition is translated into practical outcomes on the ground. We would welcome continued engagement as the Programme for Government is implemented and look forward to discussing these issues further.