

Bourke Solar and Battery Energy System

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Executive Summary

This paper, written for Roy Butler MP, outlines the imperative need for a solar and battery renewable energy system tailored specifically for Bourke Shire in New South Wales (NSW). With a focus on truth and a commitment to honest evaluation, it becomes clear that the current reliance of the National Energy Market (NEM) on the grid is not only insufficient but also a looming failure for meeting Bourke's future energy needs.

Bourke Shire stands at a critical juncture. The relentless decline in the cost of rooftop solar is poised to undercut the very cost of grid transmission. This impending economic reality will drive private entities to sever their ties with the grid, opting instead for standalone solar and battery systems. Such a shift will render the grid a stranded asset, a relic of a bygone era. Consequently, NEM-dependent suppliers will be driven out of production, unraveling the very business model that once sustained them.

The stakes are particularly high for Bourke Shire, given its remote location and the extensive grid transmission distance it relies upon. But in this vulnerability lies a remarkable opportunity. Bourke is uniquely positioned to embrace and harness the potential of a self-sustaining solar and battery energy system, paving the way for a future characterized by abundant, low-cost, and reliable energy.

To embark on this transformative journey, the first crucial step is the deregulation of the current monopoly system by the NSW Government. An unregulated market would unleash the power of market forces and entrepreneurial innovation, birthing a new era of plentiful, affordable energy. This strategic shift holds the promise of not just safeguarding Bourke's energy future but also catalyzing a period of unprecedented prosperity.

Moreover, Bourke Shire has the potential to serve as a pioneering test case, leveraging the unique political leverage of its independent state member of parliament. A partnership with a suitable Aboriginal nation to manage this new unregulated energy market would add a robust layer of political and social support. The involvement of an Aboriginal nation is a potent political strategy, capable of uniting diverse stakeholders behind a common cause.

In conclusion, the vision for Bourke Shire is clear: a proactive embrace of deregulation and renewable energy solutions can transform vulnerability into a beacon of sustainable success. By boldly stepping into this future, Bourke can secure an abundant, cost-effective energy supply and set a powerful precedent for other regions to follow.

Rooftop Solar - A Technology Disruption

The rooftop solar industry is not merely an emerging trend; it is a full-blown technology disruption, rapidly transforming our energy landscape at an exponential rate. This is not just a gradual addition of new generation capacity but a seismic shift that is reshaping the very foundation of our energy systems¹.

History is replete with examples of technology disruptions, and rooftop solar is following this well-trodden path. Mainstream analysts, clinging to linear projections and assumptions that the future will mirror the past, often miss the profound implications of these disruptions. However, those who specialize in understanding technology disruption recognize the patterns: instead of straight-line forecasts, they employ technology S-Curves, illustrating how adoption accelerates and then levels off as the technology matures. The transition period is remarkably swift, typically occurring within a decade. Consider the rapid replacement of traditional phone technology with smartphones as a prime example².


Rooftop solar is already tracking along this disruptive pathway. As technology disruption specialists have predicted, the adoption rate is accelerating and shows no signs of slowing down until it has thoroughly displaced the incumbents. By 2030, or likely even sooner, rooftop solar will dominate the energy landscape, having overtaken traditional energy sources. Incumbents often fail to anticipate the rapid pace of such phase changes, leaving them unprepared and vulnerable.

For Bourke Shire, this technology disruption presents a compelling case for immediate action. The traditional energy suppliers, ensnared in outdated business models and infrastructure, are unlikely to adapt swiftly enough to remain viable. In contrast, embracing rooftop solar and battery systems positions Bourke at the forefront of this energy revolution, ensuring a resilient, sustainable, and independent energy future.

As the Independent State Member of Parliament, your leadership is crucial in navigating this transition. By championing the deregulation of the energy market and fostering an environment where innovation can thrive, you have the opportunity to secure a prosperous future for Bourke. This is not just a policy decision but a chance to lead a transformative change that will resonate for generations.

The urgency cannot be overstated. The pace of technological change means that the window for action is narrow. Rooftop solar's rapid adoption trajectory demands proactive, decisive leadership to ensure that Bourke Shire not only keeps pace but leads the charge. By doing so, you will help usher in an era of abundant, low-cost energy, setting a powerful example for other regions and ensuring that Bourke Shire remains a vibrant, sustainable community.

¹ <https://www.youtube.com/watch?v=Dv6WzQdWuQ8>

²  Brighter | Episode 1 - The future of the environment is brighter than you think

This is a moment of truth, a call to action. The decisions made today will determine the energy future of tomorrow. Seize this opportunity to be the catalyst for positive change, ensuring that Bourke Shire thrives in the face of this inevitable and transformative technology disruption.

Planned Solar Farm for Bourke

Bourke Shire holds a critical asset in its hand: the NSW Government's development application for a 5-megawatt solar farm situated between Bourke and North Bourke. This solar farm represents a pivotal step forward in securing Bourke's energy future. However, time is of the essence. Technology changes at a rapid pace, and often by the time we fully understand its trajectory, the opportunity to act has already passed. Fortunately, in this case, ITP Developments Pty Limited and the landowners are well advanced on this critical pathway.

Coupled with the increasing adoption of rooftop solar across Bourke, this planned solar farm sets the stage for a transformative future. The convergence of these two elements creates a robust foundation for a sustainable, self-sufficient energy system in Bourke Shire.

Superpower

Conventional energy systems are designed to meet peak demand, which results in inefficiencies and higher costs. In contrast, a 100% Solar and Battery system is engineered to handle the worst sunlight times of the year. This design philosophy means that for the majority of the time, there will be an abundant supply of energy available at virtually zero cost. Technology disruption specialists refer to this phenomenon as "Superpower." This excess capacity offers a unique advantage: it provides an almost limitless, free energy supply that can drive economic and social opportunities.

Future Economic and Social Opportunities

The potential of this Superpower is vast and brimming with possibilities. With virtually free energy, Bourke Shire can become a beacon for entrepreneurial activity, attracting businesses and innovators who can leverage this resource to create new industries and economic growth. Imagine a community where energy costs are no longer a barrier, where the power of the sun drives both economic prosperity and social well-being. Bourke Shire stands on the brink of becoming an attractive and thriving hub of opportunity.

Energy Market Operator

Just as the Australian Energy Market Operator (AEMO) plays a crucial role in the broader energy system, Bourke will need a dedicated Energy Market Operator to manage this new era of abundance. The Murrawarri Peoples Council is an ideal candidate for this role. Having observed their growth and development over the past decade, I can attest to their readiness to embrace and manage this fast-paced technological disruption. Their leadership can ensure that the benefits of this energy revolution are equitably distributed and sustainably managed.

Conclusion

To realize this vision, deregulation of the current energy market system is essential. This is where your unique position of influence within the parliament becomes paramount. The politics of deregulation is complex and challenging, but with your leadership, Bourke can navigate this transition successfully.

Your role is crucial in championing the deregulation efforts, enabling the market forces and entrepreneurial spirit necessary to deliver this abundant, low-cost energy system. By leveraging your influence and working closely with the Murrawarri Peoples Council, you can help create a sustainable, prosperous future for Bourke Shire.

In conclusion, the time to act is now. The convergence of technology disruption, planned solar infrastructure, and political will presents a rare and fleeting opportunity to transform Bourke Shire into a model of sustainable energy and economic resilience. With your leadership and commitment, we can ensure that Bourke not only survives but thrives in this new energy landscape, setting a powerful example for others to follow.