

KEY THEMES

Renewables In Ag – Where to from here?





1. Solar, wind and storage

- On-farm controlled micro grids.
- Solar optimisation (generate it, use it).
- Increased power reliability using solar and batteries in tandem.
- On-farm behind the meter batteries, controllable power.
- Support for community batteries.
- Agrivoltaics: develop models for other enterprises other than sheep grazing, for example horticulture, cattle and cropping.
- Explore off-grid communities via community scale batteries and micro-girds.
- Look at how other forms of energy storage can be used broadly (heat pumps ect.) to remove reliance from the grid.
- Hosting co-invested solar and wind.
- Host solar and wind projects alongside food and fibre production.
- Community projects to host solar projects and wind for local townships.
- Landholders hosting community batteries for local townships.
- Small scale solar to cover farm footprint and usage.
- Connecting small scale solar generation to the existing grid.
- Solar/Renewables covered dams and channels (dual benefit of water and renewables).
- Regional batteries.
- Ease restrictions of solar on grazing lands (i.e., Biodiversity assessments).
- More focus on rooftop solar.
- Agrivoltaics to small wind scale dollars for farmers.
- More small scale (5mw) solar power rather than massive solar in regions.
- More distributed local power feeding local communities.
- Explore energy storage at a local level.
- Regional Virtual Power Plants (VPPs).
- Food production compatible with solar (fruit, nuts, livestock).
- Opportunities for more distributed energy sources.
- On-farm solar and other mid-scale energy could ag solar feed-in firm the market?
- New business models and partnerships > joint ventures with farmers to allow them to access. expertise and capital to commit to co-invest in on-farm energy production and profit sharing.

2. Compensation and impact management

- Tax/Legal advice for farms re. landowner payments.
- Land management to reduce fire risks and reduce weeds and pests.
- Land-use/highest value use conversations and understanding (i.e., we have plenty of land and need to work together to decide what we "farm" on it).
- Free legal aid from farmers impacted by the energy transition (e.g., Assistance to understand rights, negotiate and review contracts with renewable energy developers.
- More time spent with farmers on land working through impacts.
- Reconsider compensation factors (e.g., valuation based on crop losses / yield losses through constructions / limited land use through construction).
- Consider on-farm succession planning in the energy transition (contract negotiations/ valuations etc.)
- Better terminal solution for on-farm renewables.



3. Shared benefits, value creation and jobs

- Comprehensive benefit sharing, develop guidelines that are best practice (a floor not a ceiling).
- Co-design location of energy assets to optimise on-farm productivity.
- Work with landholders to optimise the location of access tracks.
- Genuine shared goals (i.e., Healthy environment and communities).
- On-farm energy audits.
- Meet energy needs locally to remove reliance of the grid for transformation.
- Focus on shared value creation.
- Upskilling communities from an education and training perspective, including workforce opportunities in the energy sector.
- Use of Network Provider sub stations.
- Improve the economic sustainability of regional communities.
- Influence digital connectivity and capacity in remote and rural areas.
- Influence housing affordability so that the creation of infrastructure doesn't negatively impact communities.
- Better services for small communities improved road infrastructure where developments travel.
- Skilling up local workforce and exposing rural youth to career pathways.
- Drought-proofing through transition.
- Assist farmers to diversify income streams.
- Ensure regional-level economic benefits.
- Better, skilled businesses focussing of ag and energy nexus.
- Infrastructure improvement through roads and telco.
- New employment and career opportunities for the next generation.
- Regional skills development.
- Community Benefit Sharing Schemes.
- Jobs and employment new regional processing facilities for food and fibre.
- Regional food processing and manufacturing.
- International trade compliance and new materials.
- Support demand for renewable packaging material (ag forestry and fibre waste streams).

4. Engagement, advocacy and information sharing

- Actual partnerships, not just transactional relationships.
- More Forums like this one. We need existing hosts to engage and share.
- Develop NSW Farmers Renewables sub-committee.
- Education about the reality of large-scale wind and solar wind and solar.
- Educate and guide communities around the options for energy transition to enable them to make right choices for their communities.
- Joint communication campaign acknowledgement the collaboration (shared social licence, hearts and minds).
- Empower rural communities. Knowledge and communication; provide more positive examples.
- To take a community centric approach that is regenerative and contributes more that it consumes.
- Work with communities ahead of developments so that they advocate for their needs and are pre-armed to see the community benefits.



- Land use; more consultation, collaboration and partnerships.
- Not just electricity gas, heat, cold and carbon.
- Better advocacy and engagement.
- Local, placed-based focus.
- Communication with communities about change and transition genuine consultation.
- Strong community education programs to promote awareness and knowledge.
- Education, education, education.
- Education and research, practically applied from proof of concept.
- Involve the ag sector in the energy transition.
- Learn about ag needs.
- Support better services to small communities.
- Recognise the community is more than the Council.
- Collaborate on NEM challenges to ensure practical outputs.
- Position the energy transition as an opportunity for rural Australia rather than something that is divisive to negative.
- Better understanding of the energy transition to ensure benefits are taken advantage of.
- To be the catalyst for investment in regional communities, led by, and informed by the needs of each community.
- Resilience for communities; we don't really know what the future holds from a global perspective. Diversity at every level in life helps us build resilience.
- Employment opportunities; meaningful positions, fuller general employment
- Economic advantages; payments direct to farmers, flow on from cash in communities.

5. Pricing and affordability

- Reduce energy costs through energy transition.
- Education and facilitation of demand management (load shifting and market signals).
- Access to cheaper energy to shift industry to regional and rural areas.
- Local tariffs for energy producing regions/hosts (i.e. Cheaper energy for hosts).
- Fit-for-purpose network pricing to facilitate electrification of farming systems.
- Lower barriers to grid integration for on farm energy production.
- Lower barries for farmers to access / benefit from spot market prices when exporting energy during high demand periods.
- Flexible demand management.

6. Government Legislation, Engagement and Policy (all levels)

- Enact Federal legislation to empower and support small to mid-scale renewables through ARENA and CEFC
- Legislation to change and enable funding to flow through to regional areas (i.e. Environmental Upgrade agreements).
- Government to look at broader impacts for 2030 not beyond Renewables Energy Zones, to understand land farmers impacts from a policy setting viewpoint.
- Local Government engagement from rate payers (hosts) and industry.
- Council enablement to remove barries with planning permits and barries to accessing funding.
- Government-led renewables funding and incentivisation.
- Government to adopt and promote renewables.



- Regulatory support and incentivisation for renewables.
- Independent body/authority to evaluate new emerging technologies and pipeline activities Achieve affordable, optimised, individualised, safe supply of electricity.
- Establish an energy investment vehicle with ag bodies and regional groups and co-invest in generation.
- Collaborate on Renewable Energy Zones scale on the vision, strategic outcomes, legacy outcomes that are desired.
- State and Federal Government buy to support proven decarbonisation strategies and investment in emerging opportunities that have been adopted overseas.
- Capital injection to support large scale generation.

7. Coordination, collaboration and leadership

- Working together, uplifting one and contributing more than what can be done alone.
- To be leading industry in Australia's decarbonisation journey that others look to.
- Orchestrated power usage across farms increased throughput of existing networks.
- Power co-ops / collective renewables.
- More opportunities in regional areas for renewable developer, networks service providers. and farmers to come together to work through challenges and opportunities.
- Pool bio-waste from easement clearing / vegetation management to generate electricity.
- Transformation of the land use where possible to energy generation, across multiple energy sources.
- Renewables across all commercial sectors.
- Combine industry with energy; bring industry to energy.
- Use Government required environmental surveys to support increased knowledge of flora and fauna (i.e., understand 'what's out there').
- To demonstrate how we can act flexibility to design a fit-for-purpose and fit-for- community energy solutions.
- To be leaders in changing how regional Australia, and its roles is seen by metropolitan counterparts.
- Increased consolidation of engagement to identify and address social licence issues.
- Become a part of the next generation/iteration of the how the grid in orientated.
- Financial compensation policies across all NSPs and farmers not just transmission.
- Open thinking: farmers, due largely to geography, often don't have exposure with groups and thinking openly.
- Collective blue printing
- 'Rolls Royce' small scale reactors, owned by a farming collective.

8. Bioenergy/fuel and circular economy

- Ciricular use of waste for fertilizer and energy
- Waste products from bioenergy to be used as fertilizer
- Increased availability and integration of biofuel for machinery renewable fuels
- Use food biproducts to produce hybrid biofuels that complement not compete with food production.
- Growing bioenergy crops (carbon credits via mustard and willow crops > heat > on farm use > animal staycations).



- Biowaste as fuel.
- End of life planning what needs to happen to prepare for energy assets at end of life.
- Recycling waste products into bioenergy.
- Waste to energy and fertilizer.
- Improvements in recycling utilisation circle.
- Bio-energy hubs, circular economy.
- Waste to energy systems.
- To activate circular initiatives for co-locating and sharing inputs and outputs for improved outcomes.
- Carbon sequestration > soil improvement > circular economy.
- Production of green hydrogen for fuel and fertilizer.
- Pyrrolyl's plant owned by a farming collective.

9. Biodiversity, natural systems and cooling the climate

- Education on biodiversity.
- Soil health: understanding the big picture, why we need renewable energy (reducing carbon) and a better awareness of why farmers need to encourage 'living' soils within their farming practices.
- Provide restorative grazing practice in "offset biodiversity" areas to restore natural systems.
- Feed the world with nutritious food whilst also restoring natural systems.
- Don't miss the carbon draw down opportunity.
- Farmers can solve energy and cool the climate.
- Farmers are the photosynthesizes to monetise climate cooling.
- Energy capture plus carbon capture.
- Zero emission is unambitious, make energy and soil carbons.
- Focus on carbon removal.

10. Electric transport

- Electric Vehicle charging stations powered by onsite renewables.
- Send food to port on electric trains powered directly from solar and wind in the region (no need for battery road transport).
- Electric operated machinery.
- Transition of on farm electric vehicles.