

SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW

Organisation: WYNERGY

Date Received: 5 May 2020



G'day Alex, Felicity, Anoulack, James and Nathaniel.

This is a submission to the *Inquiry into the sustainability of NSW's energy supply and resources*.

My name is Ben Wynn, Founder and C.O.O of WYNERGY Pty Ltd.

We're a new renewable energy company located in Tamworth, NorthWest NSW.

WYNERGY is a passionate advocate for Agrivoltaics – the deliberate and considered colocation of a solar farm and farming operation; designed to functionally support continued agricultural production.

I started WYNERGY a number of years ago after listening to family and farmer conflict over the decision of some of my family to lease their land for the large *Orange Grove Road* solar farm near Gunnedah. The majority of my farming family members were disappointed that agricultural production from quality Liverpool Plains farming land would be compromised or eliminated because of the dense solar array.

Using this conflict as motivation, I designed a stock-proof Single Axis Solar tracker which is provisionally patented; and a subsequent business model. WYNERGY has 2 divisions; Agrivoltaic solar farm developments and smaller, behind the meter ground mounted solar pv assets using our 'stock-proof' tracker.

We are now developing multiple 5MW solar farms throughout the NW NSW region. We work with the host landholders to design solar farms that provide design and height functionality so as to facilitate continued farming operations. The way we achieve this mission is to use a 2Panel single axis tracker, which sits higher and has wider distances between rows. This allows for equipment access and herding capability.

Agrivoltaic solar farms have been studied in the USA; notably one research paper produced by the university of Oregon. The findings were amazing – the Agrivoltaic array paddock retained 328% more soil moisture than adjacent control paddocks; and as a result had an increase of 90% in biomass. We have used these results to inform and educate our solar farm host farmers; helping us design solar farms that will suit their farming management.

We would welcome an invitation to present to the committee; the development of Agrivoltaic solar farms present NSW with an amazing post covid19 economic recovery activity.

In addition, we firmly believe that all solar farms constructed on agricultural land should have a farm management plan agreed to by the NSW DPI which outlines the design principles which will support continued farm production in coexistence with the solar energy generation.

Please see our company overview attached – I look forward to your feedback and contact.

Cheers,

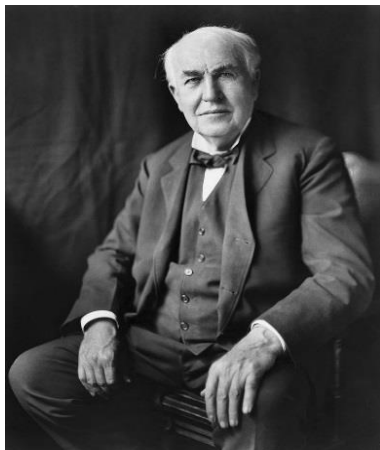
Kind Regards,
Ben Wynn
Chief Operating Officer, Exec. Director
WYNERGY Pty Ltd
Tamworth NSW Australia



WYNERGY Pty Ltd

SUPPLEMENTARY INFORMATION PACK

SOLAR FARM DEVELOPMENTS



“Opportunity is missed by most people because it is dressed in overalls and looks like work.”

Thomas Edison,
Founder and developer of DC power utilities.

MANAGING DIRECTOR'S AND CHIEF OF OPERATION'S MESSAGE

For a few months in late 2013 and early 2014, Ben Wynn pondered “how can we better use two of Australia’s vast resources (land and sun) in combination for a dually beneficial outcome?”



Enter the WYNERGY solar tracker and Agrivoltaics – a solar farming system that harnesses the sun’s power yet enables continued use of the grazing land beneath rows of photovoltaic solar panels. Elevated Single Axis Solar trackers and utilised in our solar farms to enable cohabitation with livestock such as cattle, sheep and goats to still forage on the pasture below and in between the rows of trackers.

Agrivoltaic solar farms have a tremendous economic impact on regional communities. How?

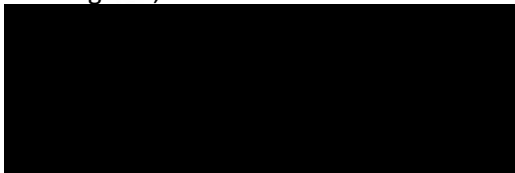
1. Social: host farmers receive an energy royalty or lease – advancing regional prosperity;
2. Social: regional job creation with rolling construction and maintenance;
3. Environment and Ethical: clean renewable energy whilst enhancing fertile grazing land;
4. Environment and Ethical: dispersed renewal power resulting in less impact on the grid
5. Financial: electricity sales through retailing and wholesaling of energy
6. Financial: clean energy creating LGC’s or carbon credits

Agrivoltaics is best practice solar farming, and a method of energy generation we feel proud to pioneer here in Australis. Studies undertaken by the university of Oregon highlighted the benefits derived from an Agrivoltaic array:

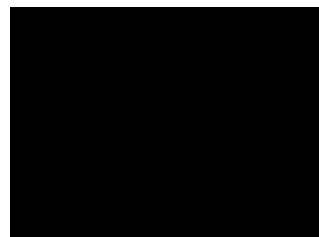
1. 328% increased soil moisture
2. 90% increased biomass (fodder) yield
3. Cooler panels generating increased volumes of clean energy

WYNERGY represents an exciting, ethical company to work in. We truly believe WYNERGY has global potential that begins right here in our regional NSW electricity grid. We look forward to your support in progressing WYNERGY’s uniquely disruptive business model to deliver positive outcomes for regional economies and investors alike – thank you!

Best Regards,



Ben Wynn
(Founding Owner and Chief of Operations)



Brad Dolahenty
(Managing Director)

WHAT DOES WYNERGY SOLVE?

Ben Wynn and Brad Dolahenty, the owners and management team behind WYNERGY, formed the company and business model to solve the land-use conflict between agriculture and solar power generation.

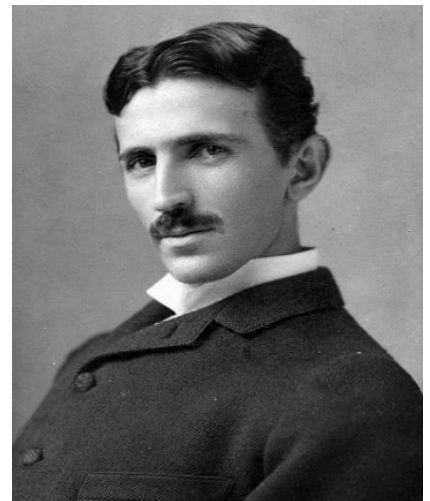
Ben developed a provisionally patented “stock-proof” solar tracking system; maximising solar energy production while cohabiting and enhancing fertile grazing and farming land.

Our unique approach offers a truly mixed land-use – combining clean-energy and agricultural, known as Agrivoltaics. Building a connection between renewable energy and food+fibre production is a fundamental challenge on fertile farming land, and here at WYNERGY we have developed a business which improves soil and boosts fodder AND energy generation yields. This has been evidenced by 2 studies in Oregon and Arizona (USA), where an increase of 328 % soil moisture resulted in 90 % increased biomass growth (fodder), compared to the control paddocks adjacent. Additionally, a microclimate created by the biomass below results in lower air temperatures around the solar installations which increase module performance (= more energy generated).

A global study identifies that if just less than 1 % of agricultural land was converted to solar panels, it would be sufficient to fulfil global electricity demand. Agrivoltaics solves two major challenge’s simultaneously – providing the world with clean energy and farm production.

*“As in nature, all is ebb and tide, all is
wave motion, so it seems that in all
branches of industry, alternating currents
- electric wave motion - will have the
sway.”*

Nikola Tesla – Co-Founder AC electricity



DIRECTORS AND ADVISORS

Brad Dolahenty, Managing Director



Brad Dolahenty has spent the last 25 years working in the investment arena mainly starting and owning several businesses' in construction, property development, sales, finance, asset management, agriculture and more recently solar farming. Brad partnered with Ben 2 years ago and joined WYNERGY as the Managing Director after seeing Ben speak at a renewables conference.

Brad was born and raised on a cattle farm near Tamworth NSW where he lives today with his family and enjoys the concept of working with farmers to create truly "Agrivoltaic" solar farms, providing a solution to build a sustainable coexistence between agricultural land-use and solar farms.

Brad was recently quoted saying "WYNERGY is helping drought stricken farmers by partnering with traditional owner to create climate friendly energy, whilst still improving our natural environments and local economy".



Ben Wynn, Chief Operating Officer and Executive Director



Ben Wynn has owned and run his civil contracting business for over 15 years, operating both in Australia and Alberta, Canada.

His building and management experience combined with extensive civil construction industry connections enabling WYNERGY stock proof solar tracker design; and an accompanying business model.

18months of employment over 2015/16 with a Tamworth based level 1&2 network service provider and solar installer provided Ben with invaluable experience. Ben developed strong relationships with key industry participants, including the NSW Essential Energy major connections team who handle solar farm connection applications on their network.

He holds a B.Bus and Dip.Ed from the University of Newcastle; and a Certificate III in Landscape Construction.





Matthew Sweeney, RARE Partners, Senior Financial Advisor

Matthew Sweeney is WYNERGY's trusted senior financial counsel. He is a chartered accountant with 25yrs experience in all matters of accountancy and finance; and has used his international and domestic experiences to become a specialist in investment structuring and negotiation.

Matt is a cofounder of Regional and Rural Equity (RARE) Partners, delivering advisory and investment development services for regional and rural communities. Key capabilities include integrating finance, communication, marketing and compliance to enable effective two-way communication between a company and the investor community. RARE Partners seek to ensure fair valuations for startup ideas, identify regional investment opportunities, and are committed to the highest professional standards to support successful company shareholder and investor relations.



Dr Stephen van der Mye, Senior Governance Advisor

Stephen has an extensive background as both an Executive Director and an Independent Non-Executive Director in a variety of organisations including agribusiness; banking and financial services; infrastructure and utility services.

Stephen's interests lie in all aspects of corporate governance including those relating to both compliance and performance throughout all levels of an organisation.

Stephen holds a B.Comm (First Class Honours); a Master of Business Law (Distinction) and a PhD from the University of NSW and a Graduate Dip. Applied Corporate Governance from the Governance Institute of Australia. Stephen is a Fellow of the Australian Institute of Company Directors; CPA Australia; the Governance Institute of Australia; and the Institute of Chartered Secretaries and Administrators.

Stephen was the founding Chairman of NEMMCO which became the Australian Energy Market Operator (AEMO) in 2009.

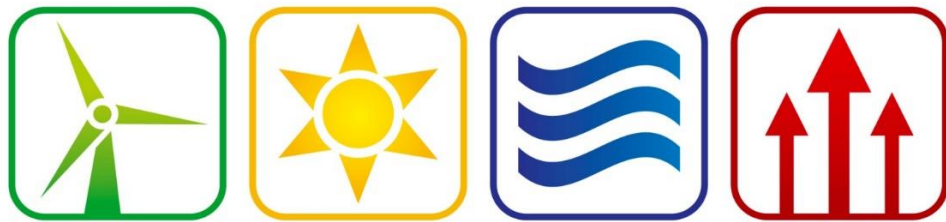


Ben Young, Development Consultant and WYNERGY Co-owner

Ben Young brings a wealth of start-up expertise to his role as director. Ben tasted initial success with the award winning 'Bar Petite' in Newcastle, selling the business in 2011. In 2011 he founded KDC, a development consultancy based in Newcastle servicing local, national and international clients including McDonalds, Caltex, Westpac and Aldi. His team now comprises over 30 enthusiastic and experienced planners, development and project managers

Ben is Managing Director of KDC, is on the board of Newcastle Grammar School, and a member of the Planning Institute of Australia. He holds a B. Arts - Human Geography and a Masters of Social Change and Development from the University of Newcastle.

WYNERGY



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