

Farm Energy Forum



Department of
Primary Industries



Local Land
Services

Farm Energy Forum Program

Tuesday 27 August

Old Flour Mill – Whisky & Chocolate, Corowa

Time	Item
9.30 – 9.50	Opening/Welcome EES & Agencies & Industry bodies involved John O'Connor / Michael Cashen
9.50 - 10.00	Introductory comments Richard Bull (State Chair of Local Land Services)
10.00 – 10.30	Key note speaker: Charles Luo - Hydrogen Power is coming 'Integrated hydrogen energy systems for agribusiness '
10.30 – 11.00	Understanding Electricity: the grid, usage and cost: Luke Christiansen Part 1 Network set up: charges and how to manage them
11.00 – 11.15	Morning tea
11.15– 12.30	Understanding Electricity usage and cost – Luke Christiansen Part 2 Energy Management + Electrical training and support available (in both NSW & Vic David Hofmann, Jay Smith) <i>e.g.: 90% subsidy on consultant to audit and plan energy savings</i>
12.30– 13 00	Lunch Break
13.00 – 1.15	Battery Update: What is the current state of technology - Charles Luo
1.15 – 2.00	Solar Pumping options overview - Luke Christiansen Opportunities for solar pumping, solar pumping solutions and configurations, the design process, solar pumping economics
2.00 – 2.15	Irrigation Check-up: Dave O'Donnell Efficiency benchmarks, simple checks & designs that save costs
2.15 – 2.45	Waste Recovery - Biomethane use – Rivalea piggery e.g. Ian Longford Other methods - Matt Hayden (Capstone generators)
2.45 – 3.00	Afternoon tea
3.00 – 3.40	Industry developed assistance 1. Dairy Energy Program: - Dairy Australia Alison Kelly 2. NSW Farmers programs and materials - Aginnovators Julia Jelbart 3. Energy Industry services representatives – Ecotechenergy Sarah Burke and local services
3.40 – 4.00	Wrap up: Day Summary - big ideas from the day Evaluation session
4.00 +	Networking opportunity with refreshments at conclusion

Farm Energy Forum Program

Wednesday 28 August

Returned Soldiers Club, Finley

Time	Item
9.30 – 9.45	Opening/Welcome EES & Agencies & Industry bodies involved John O'Connor
9.45 - 10.00	Energy Efficiency Project outline Michael Cashen NSW DPI
10.00 – 10.30	Key note speaker: Dr Neil Thompson - Hydrogen Power is coming 'Integrated hydrogen energy systems for agribusiness'
10.30 – 11.00	Understanding Electricity: the grid, usage and cost: Luke Christiansen Part 1 Network set up: charges and how to manage them
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2.45 – 3.00	Afternoon tea
3.00 – 3.40	Industry developed assistance 1. Dairy Energy Program: - Dairy Australia 2. NSW Farmers programs and materials - Aginnovators Julia Jelbart 3. Energy Industry services representatives - Ecotechenergy Sarah Burke - Reaqua Bill Leys and local services
3.40 – 4.00	Wrap up: Day Summary, - big ideas from the day Evaluation session
4.00 +	Networking opportunity with refreshments at conclusion

Farm Energy Forum Program

Thursday 29 August

Midway Function Centre, Buronga

Time	Item
9.30 – 9.45	Opening/Welcome EES & Agencies & Industry bodies involved John O'Connor
9.45 - 10.00	Energy Efficiency Project outline Michael Cashen NSW DPI
10.00 – 10.30	Key note speaker: Dr Neil Thompson - Hydrogen Power is coming 'Integrated hydrogen energy systems for agribusiness '
10.30 – 11.00	Understanding Electricity: the grid, usage and cost: Luke Christiansen Part 1 Network set up: charges and how to manage them
11.00 – 11.15	Morning tea
11.15– 12.30	Understanding Electricity usage and cost – Luke Christiansen Part 2 Energy Management + Electrical training and support available (in both NSW & Vic David Hofmann, Jay Smith) <i>e.g.: 90% subsidy on consultant to audit and plan energy savings</i>
12.30– 13 00	Lunch Break
13.00 – 1.20	Battery Update: What is the current state of technology - Charles Luo
1.20 – 2.05	Solar Pumping options overview - Luke Christiansen Opportunities for solar pumping, solar pumping solutions and configurations, the design process, solar pumping economics
2.05 – 2.25	Irrigation Check-up: Dave O'Donnell Efficiency benchmarks, simple checks & designs that save costs
2.25 – 2.45	Waste Recovery - Biomethane use - Matt Hayden
2.45 – 3.00	Afternoon tea
3.00 – 3.40	Industry developed assistance 1. NSW Farmers programs and materials - Aginnovators Julia Jelbart 2 Energy Industry services representatives - Ecotechenergy Sarah Burke - Reaqua Bill Leys and local services
3.40 – 4.00	Wrap up: Day Summary - big ideas from the day Evaluation session
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Introducing the speakers



Dr Neil Thompson has undertaken award-winning research at QUT Australia and KIT Germany in his role as Adjunct Associate Professor with the Institute for Future Environments. His work in the field of integrated hydrogen energy systems for mining and agribusiness has been regularly published in the USA and Europe leading to his recent appointment as Managing Director of ITM Power Pty Ltd for the APAC region. Since then he has developed a number of local reference sites for ITM's rapid response PEM electrolyzers across the mobility, industrial chemistry and power to gas sectors in partnership with key international clients.

Luke Christiansen is an Energy Engineer from 2XE and is working to increase the energy efficiency of businesses throughout a variety of sectors including food and beverage, manufacturing and agribusiness. He brings a vast range of knowledge across the field of energy management and has significant experience in energy auditing, process analysis, refrigeration systems and sustainability. Luke delivers Energy Management training for NSW, VIC and SA Government Agencies and utilises his skills in training and communication to uniquely connect with clients to explain the benefits of and support the transition to an energy efficient future.



Charles Luo is a Senior Energy Engineer and photovoltaic engineer with over 8 years' experience in the renewable energy and energy efficiency industry. Charles is skilled in both behind and in front of the meter energy optimisation and generation. He has managed pitt&sherry's delivery of over 80 energy assessments as part of the Victorian Agriculture Energy Investment Plan. Through this program, he has helped over 50 dairy farms identify and prioritise on farm energy productivity improvement measures. Charles also led the delivery of the AusVegVIC Energy Efficiency Capabilities Program, which helped vegetable farmers with energy efficiency and reducing energy costs. An astute analyst, Charles has more recently been integral in pitt&sherry's development of energy and cost optimisation models for the production of green hydrogen using large scale solar as part of the system's feasibility study. BEng(Hons)/BCom MIEAust NER RPEQ CMVP CEES.

Dave O'Donnell has 25 years previous experience working for the Department of Agriculture in Victoria, Tasmania and New South Wales. His particular focus is on irrigation efficiency and productivity in horticulture and irrigated dairy in Southern NSW. Dave works with industry and grower groups to draw together information on technology and management that makes the most of water and energy efficiency. Dave specializes in newer irrigation system types particularly conversion to centre pivots, irrigation scheduling, energy efficiencies. Dave is an Irrigation Australia trainer and has been conducting irrigation training on centre pivots for the last 15 years.



