## Early Needs Recovery: Energy & Soil

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A key driver for the Early Needs Recovery Energy and Soil project is to increase profit from improvements in energy efficiency and to reinvest on farm. The Drone Mapping will highlight the potential risks of soil and plant health decline due to high-intensity rainfall events.

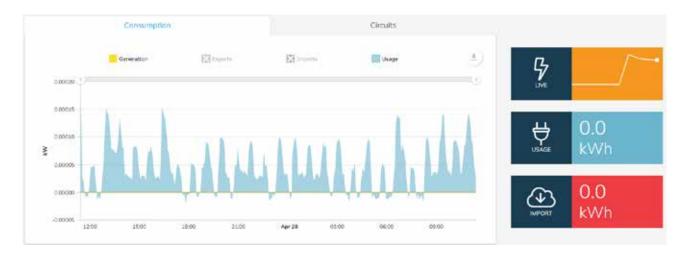
Profit from improved efficiency can be reinvested into projects that improve environmental outcomes or through education highlight opportunities to replace infrastructure if recovering from unexpected events. For people, improved and efficient management takes care of those performing the work, while risk management plans can highlight the risks to business with purposeful strategies designed to mitigate against potential future events and changes. To add further value to the Recovery & Resilience Project Berries Australia have been successful in targeting additional industry grant funding.

As part of the project there are Type one and Rapid Assessment energy audits available to growers as well as Light Detection and Ranging (LiDAR), and Full Spectrum drone flights with associated mapping. There are limited spots available exclusively for Blueberry growers in the Coffs Harbour region that complete the **Energy** and **Run Off** modules on the Hort360 platform.

The sites receiving the audits will also receive Switchable Real Time Energy Monitoring devices (RT). The RT devices will open further opportunities for those as part of the trial to upgrade infrastructure with reduced upfront costs through the NSW Climate and Energy Action programs Energy Certificate Scheme.

This program is currently open for any site wishing to pursue energy efficiency gains. RT devices are a great tool for instant access to data to manage energy consumption, track Carbon emissions, and guide the solar design process. Using the mobile app, you can also set budgets, or switch electrical devices on or off from a remote location.

To show what benefits an Energy Audit and implementation of efficient infrastructure can bring check out the article on PAGE 55 of the Autumn edition of this journal, which details the outcomes from two audits conducted on Strawberry farms by the Queensland Farmers Federation.





**Drone.** Photo credit: John Hay

In addition to the audits LiDAR, RGB and Vegetative Index (VI) drone mapping will take place with 2D and 3D maps delivered to the grower. Also useful for business plans, plant health can be monitored, and soil erosion can be determined from the slope with targeted drainage plans to mitigate against current and future risk associated with a potential increase in rainfall intensity.

The ability to utilise the drone for spraying and targeted fertiliser applications based on the VI will be explored briefly as this can only occur under specific conditions.

Educational material that integrates both Hort360 and Early Needs projects will be developed and disseminated to the wider industry member base. Hort360 is a tool that highlights current practices, potential risks and actions to take.

Once a module is completed a report is sent to you with some potential actions to take and links to information and resources. We can then drill down and provide further insights on where you could increase potential profit, improve resilience, or help plan for future events.

To register your interest for Hort360, and the chance to become one of the sites or to find out more contact

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## Acknowledgements

The Early Needs Recovery Program is part of the \$150 million Primary Industry Support Package which is co-funded by the Australian and NSW Governments. For more information about the program, please visit www.lls.nsw.gov.au/what-we-do/ our-major-projects/early- needs-recovery- program



EDITION 15