Australian wine industry tackling climate change

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Most Australian wine producers surveyed were taking steps to mitigate against climate change, the study found. Credit: Wendy Harman

Wine businesses around the country are taking steps to offset the potential effects of climate change, a study has found.

Associate Professor Jeremy Galbreath, of the Curtin Graduate School of

Business, surveyed 532 Australian wine companies in Victoria, South Australia and Western Australia. Participants were asked about their knowledge of climate change and the measures they were taking in order to mitigate the potential impact on their industry.

Dr Galbreath says the study was not aimed at gauging businesses' opinions on climate change, but rather to find out what measures are being undertaken by businesses in various wine regions.

More than half of respondents said they had implemented or were in the process of implementing measures to reduce the number of agrichemicals used in their businesses.

The study also showed that water saving techniques were common practice, with three quarters of respondents in Western Australia saying they were attempting to save water in their vineyards.

Many producers were implementing mitigative measures that would reduce their greenhouse gas emissions, such as use of alternative energy sources, use of alternative packaging like lightweight glass and PET bottles, reducing refrigeration loads and extra plantings of trees and shrubs to act as carbon sinks.

Others were focused on adaptive measures like switching to hotter climate grape varieties and canopy management techniques that address potential increases in temperature.

Dr Galbreath said the findings suggest wine businesses are implementing measures in order to adapt to the possible impacts of climate change.

"Some are doing these things because of economic reasons. For example, businesses can save money by reducing their energy or resource use," he said.

Wine producers readily exchange technical and industry knowledge in order to plan for the opportunities and risks that lie ahead, said Dr Galbreath.

The survey also allowed for respondents to make comments if they wished to do so. Despite some respondents expressing scepticism as what extent climate change is happening, most producers "were clearly implementing actions that were mitigative and would end up reducing greenhouse gases anyway," said Dr Galbreath.

"I think overall we can say that the Australian wine industry appears to be putting in place actions that would be appropriate if you are looking to mitigate or adapt to climate change," he said.

"This is an industry that has learned to adapt over and over in Australia. I think the Australian wine industry is savvy and will adjust to changing climatic effects as necessary."

The study was sponsored by Wines of Western Australia.

Associate Professor Richard Eckard, Director of the Primary Industries Climate Challenges Centre at the University of Melbourne said the wine industry's use of nitrogen fertiliser, which can create the greenhouse gas nitrous oxide when added to soil, is very tactical and targeted.

"Their nitrous oxide emissions are actually very small. If the entire industry halved their emissions, it would contribute two thirds of nothing. The emissions from extensive grain production is quite low as well. The real emissions are from livestock industries," said Associate Professor Eckard, who was not involved in the study.

"The most effective thing livestock producers can do is focus on emissions intensity. That means changing the efficiency of their system,

like breeding their cows a year earlier so their system is more efficient and each kilogram of beef comes with a lower footprint," he said.

"In the dairy industry, that may mean moving to extended lactation or in the wool industry increasing fertility of the flock through higher lambing rates. The biggest net change we can make in livestock is with animal numbers, by producing more product with the same input."

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