



Speech by

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FORESTRY AND LAND TITLE AMENDMENT BILL

Ms LEE LONG (Tablelands—ONP) (4.08 p.m.): In speaking to the Forestry and Land Title Amendment Bill 2001, I find I cannot get enthusiastic about it and I am sceptical about the prospects of forest farming and carbon credit trading on the stock exchange. At this point, as we know, the United States is rethinking its position on the Kyoto protocol. So the future on this subject is unclear. I understand that New South Wales and some countries have already started to speculate in carbon credits hoping to get in on the ground floor. That was until the USA stalled the process. Queensland would also want to be in on the ground floor if some form of the Kyoto protocol ever goes ahead, but the question is if.

Contrary to some beliefs, scientific researchers have discovered that the rush to create a carbon credits trading scheme and to plant extra trees to reduce global warming may all be in vain. Experiments have shown that planting trees may not thwart global warming or serve as an adequate substitute for reducing heat-trapping greenhouse gas emissions. Experiments have also shown that, after initial growth spurts, trees grow more slowly and do not absorb as much excess carbon from the atmosphere as expected. Researchers said that once forests initially capitalise on the extra carbon in the atmosphere they quickly deplete nutrients in the soil, their growth slows dramatically and their ability to store excess carbon is curtailed. A leading ecologist found that the impact of existing forests on carbon in the atmosphere may not last very long and may not be very significant. Therefore, the impact of forests on carbon dioxide may not materialise in any important way.

Scientists who did not participate in the studies said that the results were potentially very important in determining the role which forests play in regulating climate change. If this is true of forests in general, we may not be able to count on existing forests to maintain a high capacity to absorb carbon and, therefore, we may not be able to look to forests to eliminate the threat of global warming. As plants grow, they absorb carbon dioxide in their tissues and emit oxygen. Carbon dioxide levels in the atmosphere have been increasing for decades in conjunction with fossil fuel consumption, traffic and industrialisation. Many scientists believe the rising levels of CO₂ and other emissions in the atmosphere are trapping more of the sun's heat, driving temperatures up and causing global warming. Some computer projections predict that levels of these so-called greenhouse gases will rise 35 per cent to 50 per cent in the next 50 years, with temperatures increasing along with them.

Conservationists have advocated protecting existing forests and planting new ones so they can serve as carbon sinks which would help to regulate the atmosphere and moderate global warming. However, other studies suggest that those hopes are too optimistic. In a test plot, pipes steadily pumped an air mixture containing 560 parts per million of carbon dioxide into the tree canopy. It simulated what computer models predict atmospheric conditions will be like in 2050. In a control plot, pipes pumped conventional air with a carbon dioxide level of about 365 parts per million. The trees exposed to more carbon dioxide grew at a rate up to 25 per cent faster. In the two years since, the growth in the tree rings fumigated with extra carbon dioxide slowed to about the same rate as the control trees. It was reported that expectations that the trees would continue to sequester large amounts of additional carbon were unduly optimistic. The lead researcher blames the trees' return to slow growth on a shortage of other nutrients, notably nitrogen. When nitrogen was added to the test plots, those trees grew more quickly again.

Farming, air pollution and other activities are increasing the levels of some forms of nitrogen in the environment, but those sources probably would not directly fertilise forests to a meaningful degree. Forests may slow down the rate of increase of carbon dioxide in the atmosphere, but most forests exhaust soil nutrients very quickly. From that point on, the trees showed no response. A second study examined decomposing leaves and roots on the floor of the experimental forest plots. They found that the total amount of litter increases in a carbon dioxide enriched atmosphere, but so does the rate at which it is broken down. The carbon returns to the atmosphere rather than being incorporated into the soil. Once a leaf falls from the tree, its carbon is recycled back into the atmosphere in about three years.

There are still many questions to be answered, such as the issue of property rights. What happens if trees are destroyed by fire, flood, disease, drought, grubs or any other natural or man-made disaster? My understanding is that three titles could be issued over one plot of trees— one for the land, one for the wood and another for the carbon. This bill relates to the title over the carbon. My concern is the danger that forest farming will be promoted as a viable option before legitimate carbon credit trading systems actually become a reality and while there is still a great risk it might not even come about. It seems to me that everyone has jumped on the bandwagon. It is a bit like the story of the emperor's new clothes.
