

S'poreans willing to fork out 1% of income to ensure no more haze: Study

SINGAPORE – People in Singapore are willing to cough up nearly 1 per cent of their annual income in order to guarantee the absence of transboundary haze for a year, researchers from the National University of Singapore (NUS) have found.

In total, they are willing to pay US\$643.5 million (S\$913 million) a year — large enough to make a “substantive impact on the problem” if used for land conservation and restoration, the researchers state in a paper published in February’s issue of the journal, *Environmental Research Letters*.

The paper’s authors, Ms Yuan Lin, Mr Lahiru Wijedasa and Dr Ryan Chisholm, wrote: “Our results indicate that Singaporeans experience sufficiently negative impacts of air pollution (in) their day-to-day life, or personal health during haze periods, that they are willing to trade off personal financial gain for improvements in air quality.”

Transboundary haze is a long-standing problem in the South-east Asian region, largely caused by the

drainage of carbon-rich peatland as well as companies and farmers in Indonesia using fire to clear land. Singapore experienced its worst haze episode in 2015 from September to November, with the Pollutant Standards Index hitting hazardous levels. Since then, Indonesia has renewed efforts to prevent fires, although a state of emergency was declared last month in Riau province over forest and land fires.

The economic impact of haze pollution here has been estimated using cost-benefit analysis before, but the researchers said that the figures could be an under-estimate because they exclude impacts — such as non-hospitalisable health effects — that are difficult to infer from economic data. The 2015 haze episode was estimated to have cost Singapore S\$700 million in losses.

The NUS researchers surveyed 390 people in public areas from November 2015 to February 2016 on their willingness to pay, should the Singapore Government be able to guarantee good air quality year-round. The

participants, from various age and income groups, were given options ranging from 0.05 per cent to 5 per cent of their annual income, after they indicated if they were willing to support such a haze mitigation fund.

The average person’s willingness to pay was an estimated 0.97 per cent of his/her annual income. However, about three in 10 respondents were unwilling to pay even the minimum option of 0.05 per cent of their annual income.

Mr Wijedasa said that one of the solutions proposed for the haze problem is payments for ecosystem services. “This could take the form of richer nations aiding better land management and restoration by making regular payments,” he said. “Indonesia has estimated that it needs US\$2.1 billion to help restore two million hectares of peatland in (the country). They have currently only received US\$50 million from Norway and US\$17 million from the United States. Could this shortfall be filled by Singapore (and other countries in the region)?”

Mr Tan Yi Han, who is not involved in the study and is co-founder of non-governmental organisation People’s Movement to Stop Haze, said that the findings are helpful and “should motivate the Singapore Government to spend on measures to prevent haze, such as a subsidy on certified sustainable palm oil, as well as aid to support peat restoration and protection efforts in Indonesia”.

His organisation’s survey last year found that more than nine in 10 respondents were willing to pay more for certified sustainable products to help mitigate the haze, Mr Tan said. Most were willing to pay 5 to 10 per cent more.

Consumers game to chip in to avoid any haze include Mr Steven Lim, who is in his 40s and self-employed. How much he is willing to contribute would depend on the amount needed to make an impact. “Maybe S\$10? Multiplied by many individuals, it would be a lot,” Mr Lim said, preferring that the money goes to the Indonesian government.

NEO CHAI CHIN