The carbon tax reduces negative externalities and pollution economics essay

Carbon tax will have an impact on the negative externalities and the environment in Australia. Most economists recommended the adoption of a carbon tax to achieve carbon emission reductions. They argued that the carbon tax costs lowest to reducing carbon among emission reduction policies. Carbon tax is known as a most efficiency measure to reduce carbon dioxide emissions. Carbon tax is an environmental tax and also is a Pigovian tax. Generally basing the carbon content of coal, oil, natural gas and other fossil fuel, carbon tax is designed and levied according to the fixed tax rate. Carbon tax is a kind of consumption tax levied on fossil fuels (Jane Andrew, Mary A. Kaidonis, Brian Andrew, 2010). Carbon tax levy will raise the price of fossil energy products. The price increase will promote the economical use of resources. The prices of non-fossil energy become more competitive, and ultimately make the reduction of greenhouse gas emissions. Carbon tax is conducive to promoting the internalization of the external negative effects with consumption of fossil fuels. With the interior of fuel costs and increasing the cost of energy, it is useful to achieve the objective of reducing energy consumption, and thus to control carbon dioxide emissions. Carbon tax could better serve to reduce pollutants, especially carbon dioxide emissions, but it also can solve the problem of negative externalities.

The carbon tax can reduce pollution levels

Introduce of a carbon tax can promote prices increase of fossil fuels and other energy-intensive products then to suppress fossil energy consumption, and thus to reduce carbon dioxide emissions and aims to reduce emissions of other pollutants. As Figure I shows, a carbon tax of fossil fuels buyers will increase the price buyers pay. Before the introduction of carbon tax, the

equilibrium of fossil fuels is Q1 and the equilibrium of price is P1. After introduce of a carbon tax, the price of fossil fuels will get rise. The demand of fossil fuels from firms and household will decrease, is represented by a leftward shift of the demand curve from D1 to D2. Hence, new equilibrium quantity and price decrease from Q0 to Q1 and P0 to P1, respectively.

The increase of the demand of coffees will be shown by rightward shift of demand curve from D0 to D1 in Figure 1. Hence, new equilibrium of quantity and price will be established that the quantity increases from Q0 to Q1 and price increases from P0 to P1, respectively.

Therefore, the introduce of a modest carbon tax is conducive to increasing cost of the high energy consuming enterprises and high-polluting businesses, inhibition of high energy consumption and high emission industries. Meanwhile, a carbon tax will help promote and encourage enterprises to explore and use of renewable energy, speed up the elimination of high energy consumption, backward technology with high emission, research, development and use of energy saving technology, which will certainly promote the adjustment and optimization of industrial structure, reduce energy consumption and accelerate the development and application of energy saving technologies (Ram M. Shrestha and Charles O. P, 1999).

Essentially, the carbon emissions caused global warming is an externality problem. The so-called external effects refer to non-market effects which the producers or consumers bring to other people during the actual economic activities. The first theorem of Pigou’s welfare theories argued that in a fully competitive market, if there is no externality, and if there is no possible that

market information is not sufficient, the result of market competition will be Pareto optimal. Conversely, if the market does not meet any of the full competition, no externalities, full information these three conditions, it will result in differences between individual cost and social cost (Annegrete Bruvoll and Bodil Merethe Larsen, 2004).. This difference is difficult or cost to eliminate itself in the market so it is difficult to reach to the Pareto optimal state. To eliminate the cost difference led up to the optimal Pareto improvement, he suggested the government should tax the polluters based on the harm caused by pollution make up the gap between individual and social costs in the form of carbon tax. This action is helpful to let the producers transfer pollution emissions costs into the price of the product. This tax is also called " Pigovian taxes." (Frank Scrimgeour, Les Oxley, Koli Fatai, 2005)

From the above analysis, carbon tax would not only be able to promote polluters to reduce the negative externalities, it is also an incentive also for clean energy companies, so Pigou Tax is an important policy tool for policy makers to reduce carbon emissions(Lucas Skoufa and Rick Tamaschke, 2011). The purpose of a carbon tax is to reduce external diseconomies, achieve the internalization of external diseconomies and correct of market failure caused by loss of efficiency in order to achieve optimal allocation of resources. Carbon tax is actually a " Pareto improvement ", which would be an improvement and optimization of allocation of resources to the society as a whole to achieve a more efficient use of resources. Carbon tax can solve the external economy as well as to achieve " Pareto optimal" state.

Conclusion

Carbon tax can influence the price and quantities of fossil fuels demand, so it will helpful to reduce pollutants, especially carbon dioxide emissions. It is a good measure to Australia to protect the environment. Carbon tax also can reduce negative externalities.