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(人文社会科学分野)

日本、台灣及加拿大卑詩省碳稅制度之跨國比較

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計畫名稱	日本碳稅制度之研究
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成果報告書內涵	完成日本碳稅制度之研究後，將其與加拿大卑詩省以及台灣碳稅之施行做比較，完成「日本、台灣及加拿大卑詩省碳稅制度之跨國比較」一文，並將其作為「研究成果報告書」

日本、台灣及加拿大卑詩省碳稅制度之跨國比較

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摘要

日本經過兩個階段稅制改革實現碳稅之徵收(Ishi, 2001)，以對抗全球暖化，在 2003 年日本將「石油稅」改為「石油及煤炭稅」，在 2012 年 10 月以提高「石油及煤炭稅」稅率 298 日幣/碳當量的方式開徵「全球暖化對策稅」，進行「暗示型碳定價(implicit carbon pricing)」，成為亞洲第一個課徵碳稅的國家。此外，加拿大卑詩省在 2008 年獨立於原有的能源稅之外，以逐漸增加每噸碳排放量稅率的和緩方式開徵碳稅，屬於「明示型碳定價(explicit carbon pricing)」，完善的稅收中立配套措施及弱勢群體免稅機制，產生卓著的實施成效，除了吸引該國亞伯達省跟進，該國也宣布將通盤考量於 2018 年全面施行碳稅。因應全球暖化，台灣在 2009 年及 2015 年通過「減碳三法」，為台灣減碳立下法律根據。目前台灣能源相關稅收隱含在關稅、貨物稅、營業稅等項目中，涵蓋極為廣泛，主管機構、法律依據、稅賦支用規範均有不同，要整合這些項目以因應全球暖化，已成為台灣目前制定能源稅所討論的核心重點之一，因為牽涉極廣，延宕多年仍未達成共識。柏克萊大學 Norgaard 教授 1994 年提出社會生態系統的改變是以組成它的各項成分之間的共演化而發生之

概念(Norgaard, 1994; Gual and Norgaard, 2010)。本研究除了呈現各國開徵碳稅的實際做法，亦依據此一共演化概念，探討台灣以碳稅作為碳定價機制之主要原則。

關鍵字：明示型碳定價、暗示型碳定價、共演化、碳稅

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A comparison of carbon taxes for Taiwan, Japan and British Columbia, Canada

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Carbon tax is a noteworthy policy against global warming (Pearce, 1999). This study conducted a cross-country comparison of carbon taxes, by presenting practical practices of carbon taxes in Japan, Taiwan and British Columbia, Canada. In response to global warming, Japan prudently designed and implemented carbon tax after two stages of tax-reforms: adjustment and creation (Ishi, 2001). In 2003, Japan adjusted its original energy tax system by introducing a tax on coal and reducing the tax rate of “Promotion of power-resources development tax,” and then renamed “Petroleum tax” as “Petroleum and coal tax.” In October 2012, extra 298 JPY / carbon-equivalent tax are gradually added to the rates of “Petroleum and coal tax.” This increased tax is the “Tax for climate change mitigation.” Japan became the first country in Asia to impose carbon taxes. Since this tax is affiliated with an energy tax, rather than directly based on carbon emitted, it is categorized as “implicit carbon pricing” and is deemed as “Japan carbon tax.” Besides, British Columbia, Canada, began to impose a carbon tax in 2008, regardless of its original energy tax. Carbon equivalent tax rates is imposed on final domestic fossil fuel consumption. Different from Japan carbon tax, this tax explicitly prices carbon emitted and is deemed as “explicit carbon pricing.” With successful supporting measures and exemptions on the vulnerable, British Columbia’s economy grew faster than other provinces/territories as its greenhouse gas emissions declined. This success had attracted follow-ups (its neighbor, Province of Alberta and the announcement in whole country of Canada). Currently there is no tax directly imposed on energy or carbon in Taiwan. Fossil fuels energy is taxed/levied by Imported tariff, Value added tax, Excise tax, Air pollution control fee, Soil and groundwater pollution remediation fee, Petroleum fund, etc. These present energy-related taxes cover a very wide range of competent authorities with different legal basis. Hot debated for many years, the delayed “Energy tax” is still struggling to meet consensus. As Taiwan is apt to response to mitigation, the collectedly called “Three Carbon Reduction Law” in Taiwan has been passed and/or amended. Potential legal basis of carbon tax in Taiwan has emerged. Professor Norgaard in University of Berkeley had proposed in 1994 that the change in social-ecosystems

occurred as a result of the co-evolution between its components (Norgaard, 1994; Gual and Norgaard, 2010). Based on this evolution theory and the two examples of Japan and British Columbia, this study provides several principles for carbon pricing mechanism for Taiwan.

Keyword: explicit carbon pricing, implicit carbon pricing, coevolution, carbon tax