

## **INCORPORATE MARKET-BASED SOLUTIONS INTO ENVIRONMENTAL ACTION PLANS: TD ECONOMICS**

*Policymakers must expand focus beyond regulation for the most effective solutions*

TORONTO, Ontario – A report published today by TD Economics recommends that policymakers incorporate market-based tools into their overall environmental action plans to help mitigate the loss of jobs, income and competitive standing for Canadian business in the global marketplace.

These tools, which include taxes, subsidies and tradable permits, are an effective way to change the cost structure of pollution to reflect its social detriments, according to the report entitled *Market-based solutions to protect the environment*. By doing so, polluters bear a higher cost for their actions, and conversely, those making an effort to pollute less incur a lower cost or greater benefit.

“Canadians are concerned about the environment and want the most pressing challenges addressed,” according to Don Drummond, Senior Vice President and Chief Economist at TD Bank Financial Group. “But many believe there’s a fixed economic cost to any environment action. To be sure costs exist but they can be reduced with an appropriate blend of market-based instruments.”

### **Expanding the Focus of Environmental Action Plan**

A key intent of this report is to expand the focus of environmental action plans beyond traditional tools of regulation and voluntary agreements.

These tools have a role to play, but for the most part they should complement market-based policies. It is important to recognize that not all environmental approaches have the same economic costs. This is an especially pressing point to make for regulation because it remains a central focus of policymakers.

Regulations distort the cost-price structure in the market, which causes companies and individuals to behave in a way that is inconsistent with their perceived best interests. A blanket emissions policy can impose exorbitant compliance costs on firms and individuals, to the point where the cost may end up higher than the value society places on reducing the environmental damage in the first place. Regulations also provide little incentive for firms and households to innovate or invest in new technology that would help them exceed the minimum threshold for compliance, because the financial benefit in doing so is zero.

Any sensible policy approach needs to go beyond regulation, but not likely to its complete exclusion. For instance, a tradable permit framework would be completely ineffective without regulated emission caps. Free reign on emissions would render the price of pollution equal to zero.

### **Addressing the market failure**

An underlying challenge for policymakers is that existing prices for pollution are too low, and as such, do not reflect the true cost it has on society. Furthermore there is no incentive to alter behaviour for the greater good. This ‘market failure’ means people and companies do not take into account the consequences of their actions, resulting in overuse. TD Economics suggests that this challenge can be addressed through a blend of regulation and market-based options, including taxes, subsidies and tradable permits.

#### *Taxes*

The implementation of environmental taxes ensures polluters bear the cost of their actions. In order to reduce costs, this user-pay system – which must include a wide range of pollution sources – can prompt individuals and companies to innovate their practices.

The tax should be applied when the pollution is created. Since the bulk of the pollution associated with gasoline is created by automobiles, consumers should face the tax. Pollution created in a production process should be taxed at the firm level. However, governments must be sensitive to a firm's competitive position in the market place when setting these taxes.

The revenues generated from environmental taxes should be used to lower other taxes, such as personal income tax, or to finance subsidies that help the environment. This 'tax shift' can help reduce existing taxes that create distortions or disincentives to working or investing.

This approach is not without its challenges. Success stems from establishing a tax rate that can address the underlying environmental concern, without unduly compromising economic efficiency.

### *Subsidies*

Pricing for current technology does not incorporate the cost to the environment. As such there is no incentive to embrace new and costly technology that will only be beneficial to the environment. A subsidy can make up the difference between the marginal private cost and social benefit. This subsidy could make existing technologies more affordable or fund new technologies.

However, like taxes, choosing the optimal amount for a subsidy is extremely difficult. Also subsidies only work if they change behaviour, otherwise they will result in a "free-rider" problem when firms or consumers receive a subsidy for actions that they were already planning to undertake.

Furthermore tax-payers ultimately bear the cost of the subsidy. It must either come from an equivalent increase in taxes, or from a drawdown in existing government coffers (i.e. surpluses), which in turn amounts to forgone future tax or debt reductions. That is why, to the extent possible, it is more efficient to make the polluter pay through tax shifting.

### *Tradable Permits*

Cap-and-trade policies effectively embed the 'polluter pay' principle. An economy-wide reduction in emissions is set and then allocated across a group of firms within specific industries using emission credits. These credits (which are allotted a specific monetary value) represent the amount of emissions each firm is allowed to produce over a given time frame. If a firm ends up exceeding its allowance, it must either purchase credits from other producers who have surplus credits or face a hefty penalty. From an economic perspective, greenhouse gases are reduced in an efficient and least-cost manner with those willing to bear the costs of pollution paying the market price for that decision. Furthermore, firms have the flexibility to customize their own solutions and timelines.

There is a global push towards trading systems in carbon pricing, and the longer Canadian firms have to become accustomed to the cap-and-trade program the better off they will be. Furthermore if technology-adoption is made early, there is a better chance that Canada will be a provider of surplus credits on the global stage.

Yet the international carbon market is in its infancy, and market anomalies exist that could result in a direct transfer of wealth from the Canadian companies to developing nations. As such it is more attractive to start with a domestic trading platform, which can eventually link into a global system.

"Sensible environment policy requires a myriad market-based options as well as regulation and moral suasion," said Mr. Drummond. "Governments should take a holistic approach to achieve the right policy mix. By doing so, we will mitigate the risks and maximize the rewards for society."

*Market-based solutions to protect the environment* can be found at [www.td.com/economics](http://www.td.com/economics).

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