C anada’s National Round Table on the Economy and the Environment (NRTEE) has recently recommended that we adopt a carbon tax as the preferred policy instrument for addressing the climate change challenge. For its part, the Canadian Council of Chief Executives (CCCE) welcomed this NRTEE report, noting that the proposal echoed the earlier CCCE Policy Declaration in recognizing the need for economy-wide signals to pressure businesses and individuals alike to reduce emissions of greenhouse gases (GHGs). Moreover, a market-based carbon tax also came in first place in IRPP’s Canadian Priorities Agenda, an impressive agenda-setting and policy evaluation exercise involving nearly 50 of Canada’s recognized policy analysts and designed to identify the country’s top policy priorities.

As a general principle, a carbon tax on all emissions is a decidedly preferable approach to the opting-in/voluntarism of Kyoto. And Kyoto is arguably superior to the recently embraced Bali Action Plan, which contains no binding commitments on signatories. While the Kyoto/Bali initiatives are obviously important for catalyzing climate change to the top of the global policy agenda and may well be of signal importance in triggering creative and effective programs in individual nations, Bali will almost certainly fall far short of expectations. This is so because while there are very substantial economic costs to “volunteering,” there is no guarantee that recalcitrant nations will follow through and, therefore, no guarantee the climate change challenge will be successfully addressed.

T he Harper Conservatives appear to be taking an intermediate position between reliance on the market (and expressly on putting a price on carbon emissions) and non-binding voluntarism. Specifically, the government is, thus far at least, rejecting the NRTEE proposal for a carbon tax in favour of a regulatory regime that would target the big polluters in a “make the polluters pay” approach. Operationally, the concerns here are that (1) the targeted command-and-control approach could be prone to very substantial industrial and even provincial lobbying for regulatory exemptions and (2) it would be very difficult to...
ensure that Canadian firms do not resort to the international economy to circumvent this regulatory approach. This latter observation leads directly to the core difficulties with most of the existing proposals and, what is essentially the same thing, to the core building blocks of our proposal.

Whether one relies on prices/taxes, on some version of a command-and-control regulatory regime with financial penalties or on Kyoto’s moral voluntarism, the bottom line must surely be to ensure that the domestic economic costs associated with the chosen system will be validated by successfully controlled carbon emissions. Phrased differently, success on the climate change front will be beyond our grasp unless the emerging economic superpowers like China, India, Brazil, Indonesia and others are effectively co-opted into the process.

Our view is that the proposals on the table do not meet these tests (although the carbon tax could be reworked to provide a Canadian version of what we are proposing on a global scale). Beyond the inclusivity issue addressed above, the key flaw in all the proposals is the failure to come to grips with “free riding.” There are at least two sorts of free-rider problems. The first is that firms in non-signatory countries, or non-complying countries, will have an advantage in terms of exporting to complying countries, and to international markets generally. The second is that firms in complying countries will have enhanced incentives to outsource from, or offshore to, non-complying countries, and then re-export back to their home countries, thereby avoiding the domestic environmental regime. Moreover, as China, Brazil, India and the others continue their economic ascent, these free-riding concerns of complying countries will be correspondingly magnified and will surely test the resolve of those countries to hold to their commitments.

Not surprisingly, our approach to climate change begins with addressing these international free-rider issues, and then complementing and supplementing them with appropriate domestic policies. Moreover, the target group for addressing free riding is not governments but, rather, multinational enterprises. But governments cannot be left out of the solution. Accordingly, we are led to a two-tier approach. The first tier is concerned primarily to ensure that the carbon footprint of internationally traded goods and services attracts the same carbon tax burden as that of non-traded domestic goods and services. Readers may want to refer to this as the “tradables” tier. The second tier deals with the whole panoply of non-tax measures to which governments may resort to effect a reduction in GHG emissions. While the tradables tier will focus on firms, often multinational firms, the second tier will focus, in Kyoto fashion, on governments. We deal with these in turn.

The analytical underpinnings of the tradables tier exist, in an embryonic stage, in California’s proposal to measure the carbon footprint of its energy imports right through to their source. If the resulting carbon emissions are too high, then California will ban such imports into the state. This California approach is also adopted in the Energy Independence and Security Act of 2007, signed by President Bush in December. Section 526 of this statute precludes US federal agencies from purchasing vehicle fuel derived from non-conventional sources unless its carbon footprint is less than that of conventional petroleum. How will Alberta and the oil sands producers react? We think that it is a very safe bet that the energy patch (and the province) will not want to lose access to US government agencies and the California market (and potentially to the entire US mar-
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We presume that this tradables tier will be much more amenable to the US than was Kyoto, because both types of free-rider issues are addressed. Indeed, were the US and the EU to agree to this carbon import tariff (with this usage validated by domestic equivalents on non-traded goods), a formal international agreement might not even be required for the functioning of the first tier. This is because firms wanting to export into the huge US or EU markets, as one assumes that they will, will be subject to the carbon tariff. They will thus have an incentive to reduce the carbon footprint of their products in order to maintain their competitiveness in the US/EU markets. Even if China decides not to be part of the tier-1 system (i.e., decides not to have a domestic carbon tax), exporters of both intermediate and final goods from China will, under a destination-based system of carbon tariffs and taxes, still be taxed in the US/EU and other markets. Therefore, this first tier is more about ensuring environmental compliance by internationally oriented firms than it is about ensuring that countries, per se, are onside. In addition, since the proposed carbon tariff/tax system is destination based, it would ensure that producers located in complying nations would not, as a consequence of this system, suffer any competitive disadvantage when selling into non-complying nations.

While the first tier deals largely with companies and the use of the tax and tariff systems both to reduce GHG emissions and achieve equity between domestic and internationally traded goods and services, the second tier would address the whole panoply of non-tax measures that governments and countries may use to effect emission reductions beyond those sought by tax measures. These could include such disparate measures as Kyoto-style reductions, cap-and-trade systems, automobile mileage standards, conservation measures, incentives for the use of energy-efficient appliances, carbon sequestration requirements and energy-conserving infrastructure, to name but a few. Since the operation of tier 1 largely eliminates international free riding, a Kyoto-type approach may work quite well for tier 2 initiatives.

While it no doubt remains important to strive for binding commitments from all countries, developing firms. But outsourcing to take advantage of lax environmental policies in pollution havens will be subject to this carbon footprint tariff. The intent, and the result, will be that environmental free riding will not be rewarded.

Thus, the tradables tier of our proposal reworks the California approach by converting the regime into a national carbon tariff or a carbon import tax that would be levied on the carbon footprint of all imports from all countries (including on the carbon emissions components relating to the logistics component, especially shipping, throughout the supply chain). Consistency, as well as compliance with the international trading regime, would require that a concurrent carbon tax be applied to all domestically produced and consumed products. Without this, a non-complying nation could use a carbon tariff to protect domestic producers from import competition, a practice for which countervail would be an appropriate remedy. The impact of this first tier obviously would be greater the larger the number of participating countries. Applied globally, it would make a major contribution to meeting the climate change challenge. The mechanism, however, would be a powerful and effective policy instrument whether utilized globally, regionally — for example, within NAFTA or the EU — or by a single country.

Note that this import tariff would be levied against foreign-based exporting firms’ products, not against countries per se. Indeed, the import tariffs that will be levied on many exports from developing countries will actually be on the products of corporations headquartered in the G7 and other developed industrial countries. By way of a relevant example here, Sunday Times economics editor David Smith notes (in Growling Tiger, Roaring Dragon) that were Wal-Mart a country it would be China’s fourth-largest trading partner. Under this first tier, products imported into the US by Wal-Mart would be subject in the US to a carbon tariff on the carbon emissions of their entire production processes. Even with a carbon tariff in place, outsourcing or locating production offshore, with its attendant job loss and related problems, will no doubt continue to be economically efficient for some firms. But outsourcing to take advantage of lax environmental policies in pollution havens will be subject to this carbon footprint tariff. The intent, and the result, will be that environmental free riding will not be rewarded.

Several further related tax issues are best dealt with in this context. The first relates to whether the carbon tax should be levied on imports or on exports. That is, should it be administered on a destination or origin basis? Properly administered, both bases would provide effective incentives for firms producing internationally traded goods to reduce their carbon footprints.

While it no doubt remains important to strive for binding commitments from all countries, developing
countries may be accorded some second-tier flexibility in terms of both commitments and timing to help facilitate participation. Phrased differently, this is where the rhetoric adopted by many of the developing countries has relevance: we were not an important part of the problem in the first place, so why make us a key part of the solution when our real priority is exiting from poverty. This argument has little resonance with the first tier, however, since we are dealing in large measure with multinational enterprises whose home countries could be anywhere. It is also somewhat disingenuous in the case of countries such as China — which, despite its high poverty rate, is already the world’s largest contributor to GHG emissions — and India, which, more by default than by design, has pursued environmentally disastrous population policies.

A further inducement for developing countries to commit themselves to the second tier is that reducing the carbon footprint of their domestic infrastructure and production will also serve to reduce the carbon content of their exports and, therefore, make their economies more attractive for exporting, outsourcing and offshoring.

As readers have by now realized, the devil is clearly in the implementation details (and in particular the details relating to the carbon tariff). What will be needed is a set of “carbon auditors,” perhaps coming under the umbrella of an international blue-ribbon panel, whose job it will be to measure carbon emissions. The Canadian Institute of Chartered Accountants has for over a decade been involved in compiling requisite carbon footprint measurements. Individual firms would be able to challenge these assigned levels by requesting (and paying for) firm-specific carbon auditing. There will, of course, be start-up difficulties in compiling requisite carbon footprint data, but these should not be exaggerated. Several companies, for example, have already decided voluntarily to provide environmental labelling for their products. While the problems will be severe, they are not insurmountable. Nonetheless, it might be wise to begin with low carbon-tax and tariff rates in order to accommodate any early growing pains. Once up and running the rates could then be raised to the desired levels.

Because this is Canada, there is always a federal-provincial issue lurking in the background. This time it is who will collect the carbon tax. Since the international component would be an import tax and since the accompanying domestic tax would be an indirect tax on carbon, on both counts this falls within federal jurisdiction.

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And, in either case, the consumers in the importing country would tend to bear much of the burden of the CAT in the form of higher prices for items with larger carbon footprints. This would have the desirable effect of tending to redirect consumption to substitute products with smaller carbon footprints. The international allocation of the revenues, however, would depend critically on the administrative principle chosen. An export or country-of-origin tax would allocate the revenues from the carbon tax to where the pollution occurred, while an import or country-of-destination tax allocates the revenues to where the product is consumed. Our preference for an import or destination-
Based tax follows from the possibility that some countries, as part of a strategy of promoting exports, might decide not to institute an export tax or, where such a tax was formally adopted, to administer it in a lax and ineffective manner. On the other hand, it seemed appropriate to assume that countries will be much more likely to levy the import tax, since this will level the playing field for their own producers. Again, there are both technical and political factors at play here that will need greater attention.

A second issue has to do with how the global trading system and the WTO will look upon the tier 1 carbon measure, whether it be a carbon tariff or a CAT. So long as national environmental policies do not discriminate arbitrarily between foreign and domestic products, or between products imported from different trading partners, there should be no problem: if the carbon tariff matches the rate of domestic carbon tax, or if the CAT is applied uniformly to both domestically produced and imported goods, it may be argued that no discrimination is involved. The tax or tariff burden would certainly differ as between imports with differing carbon footprints, but this hardly constitutes arbitrary discrimination. In the case of the CAT, since there is no WTO problem with international accommodation of VATs, the fact that this CAT or carbon-added tax can be designed to resemble a VAT should help its acceptance by the WTO. Nonetheless, the intent and the pre-
sumed effect of tier 1 will be to reduce international trade when this trade is based on products gaining a competitive advantage because they do not embody the cost to society of GHG emissions. Other things being equal, for example, a case of locally produced beer would have a smaller carbon footprint than one shipped from Europe. Hence, the carbon tax on the imported beer would be higher, again all else except shipping being equal. In the first instance, this will presumably reduce trade. What happens over the longer term will depend on how firms react to the taxation of carbon emissions: the foreign firm may set up local production facilities, for example.

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Levying a CAT at the federal level has the further advantage that it ensures at least a minimal, effective GHG emissions response across the nation, even if, as seems likely, some provinces choose to pursue excessively tolerant carbon policies or to rely primarily on tier 2 initiatives. As with the GST, however, there would certainly be an opportunity for provincial CATs harmonized with the federal CAT; harmonizing provisions would simply add their provincial rate (dollars per tonne of carbon) to the federal rate.

The proceeds of the tax could be used in a variety of ways. More important, in many ways, than the jurisdictional or geographic destination of CAT revenues is their use: what is vital is that they be used to facilitate the largest attainable reduction in GHG emissions. The proceeds of the tax could be used in a variety of ways. More important, in many ways, than the jurisdictional or geographic destination of CAT revenues is their use: what is vital is that they be used to facilitate the largest attainable reduction in GHG emissions. The proceeds of the tax could be used in a variety of ways. More important, in many ways, than the jurisdictional or geographic destination of CAT revenues is their use: what is vital is that they be used to facilitate the largest attainable reduction in GHG emissions.

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Finally, while many of the above complications appear daunting, some perspective must be maintained. There seems to be rather surprising acceptance on the part of many in the policy community of the NRTEE’s proposal for a domestic carbon tax. Yet, if this proposal is to address the two free-rider problems raised above, Canada will need to supplement the domestic carbon tax with the proposed carbon import tariff. Alternatively, if our domestic response were to institute a CAT, this would have to be applied to imported goods at the point of entry. Therefore, all the complexities in our proposal are also part of an effective domestic carbon tax. If we have to go to these lengths in any event, why not employ the expertise of the international community in carrying out the carbon emissions auditing and in designing the institutional structure that will be needed for a system of global carbon tariffs? In this way Canadians can have more confidence that our efforts will be part of a global action plan that will succeed in taming the climate change challenge.

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