

# Implications for U.S. Companies of Kyoto's Entry into Force without the United States

## INTRODUCTION

This paper examines some of the potential implications for U.S. business of the Kyoto Protocol's entry into force – in particular, the effects of the U.S. decision to stay out of the Protocol.

The Bonn and Marrakech meetings adopted generally sound rules regarding the Kyoto mechanisms. However, the implications for U.S. business will depend as much or more on the domestic policies and measures of Annex B parties<sup>1</sup> as on the Kyoto rules themselves. The Kyoto rules merely establish the general framework within which national implementation will take place. Although bad Kyoto rules might have precluded efficient implementation of the Protocol, the Bonn and Marrakech rules do not ensure efficiency, since this will depend on the extent to which governments choose to utilize the Kyoto mechanisms to achieve their targets.

The implications of Kyoto for U.S. business will also depend significantly on whether the United States decides as a matter of domestic policy to undertake emission reduction requirements, and the stringency of any such requirements. This paper generally assumes a scenario in which the U.S. does not take significant domestic action to control emissions. In the final section, it considers an alternative scenario involving adoption of strong U.S. domestic measures to reduce emissions.

## In what ways could U.S. business be affected?

U.S. business could be affected in several ways by Kyoto's entry into force without the United States:

**Compliance with emission reduction requirements** - A Kyoto party could regulate emissions of U.S. multinationals to the extent that they have subsidiaries or GHG-emitting operations in the Kyoto party. Thus, U.S. multinationals could be subject to Kyoto's emission reduction targets despite U.S. non-party status. However, they could not take advantage of low-cost emission reduction opportunities in their U.S. operations to meet these requirements since Kyoto does not recognize emission reductions achieved in non-parties.

**Competitiveness** - Kyoto could have several competitiveness implications.

- To the extent the Kyoto targets raise energy prices in Annex B parties, U.S. firms would tend to gain an advantage vis à vis foreign competitors in those countries, particularly in energy-intensive industries. However, the costs of Kyoto for a country's economy as a whole as well as for particular industries will depend heavily on how Annex B countries implement Kyoto.

- Recent estimates suggest that, without the United States, the overall emission reductions required by Kyoto will be quite low and therefore the cost of achieving Kyoto's first commitment period targets would be minimal if Annex B countries fully utilize emissions trading. If so, the competitiveness implications of Kyoto will be correspondingly low.
  - However, it is unclear the degree to which countries such as Russia with surplus allowances will be willing to sell their allowances at the market price rather than establish a sellers' cartel to raise prices or bank their allowances for future use. It is also unclear the degree to which the European Union will allow companies to buy these allowances in order to comply with Kyoto. Thus, the actual costs of implementing Kyoto remain uncertain.
  - Even if the overall national costs of Kyoto prove significant, countries could choose to protect particular industries by exempting them from emissions reduction requirements or providing subsidies.
- The U.S. refusal to join Kyoto could disadvantage U.S. firms with technologies to reduce greenhouse gas emissions by limiting their opportunities to develop experience and relations under the Kyoto system. However, under the Kyoto rules, U.S. firms can participate in emission reduction projects in both developing country parties (through unilateral CDM) and Annex B parties (through joint implementation).
  - In addition, the U.S. refusal to join Kyoto could lead to negative public attitudes towards U.S. companies and even consumer boycotts, as well as to trade measures by Kyoto parties against non-parties.

**Influence on Kyoto rules** – The refusal by the United States to join Kyoto will, as a practical matter, limit the ability of the United States to shape the detailed rules for how Kyoto operates, at least for the first commitment period. This could become important should the United States decide to join the Kyoto system in the future, although the United States would retain significant leverage to change the rules as a condition of joining.

## How will different types of firms be affected?

These effects will be felt by different types of U.S. companies to differing degrees:

**Multinationals** with commercial operations or subsidiaries in Annex B parties will likely be subject to emission targets, taxes, regulatory standards, or other types of domestic implementing measures imposed by Annex B parties. This will tend to give them an incentive to move GHG-emitting activities from Annex B parties to developing countries (which do not have emission targets) or possibly to non-parties such as the United States (although the incentive to move to the United States would be less to the extent that firms believe that the U.S. will adopt emission restraints in advance of non-Annex B countries).

U.S. firms that specialize in **emission reduction technologies** (e.g., renewables or energy efficiency) could be disadvantaged if the United States does not take domestic measures to reduce emissions, since this would reduce home market opportunities. The extent of this loss will depend on the level of emission reduction measures undertaken by the United States. In addition, these firms may find it more difficult to take advantage of business opportunities created by Kyoto if individual parties attempt to limit access to the Kyoto mechanisms by entities of non-parties.

U.S. firms that **compete with companies in Annex B parties**, particularly in energy-intensive industries, may gain a competitive advantage, at least in the short-term, to the extent that Kyoto entails higher energy prices. However, this will be limited if the United States also takes domestic action. It could also be limited by defensive actions that other Annex B parties take to protect their industries from companies operating in countries without emission reduction targets.

Firms that **export to Kyoto parties** and that do not undertake voluntary measures to limit their emissions may face trade restrictions or consumer boycotts.

## COMPLIANCE WITH EMISSION REDUCTION REQUIREMENTS

Like most of international law, the Kyoto Protocol imposes obligations on states, not on individuals or companies. As a result, the Kyoto emission targets would apply to business only indirectly, through the domestic implementing legislation of Kyoto Protocol parties.

The extent to which a Kyoto party could impose emission reduction requirements on U.S. companies would be governed by the general rules of international law regarding national jurisdiction. In general, foreign law can apply to (a) foreign subsidiaries of U.S. companies and (b) the activities of U.S. companies in a foreign country.

### National implementation of Kyoto

Kyoto gives parties flexibility as to how they meet their emissions targets. Potential approaches include:

- targets for particular emitters, possibly combined with an emissions trading system;
- carbon or GHG emission taxes;
- regulatory standards (for example, relating to energy efficiency or types of fuel sources);
- subsidies for emission reduction activities; and
- voluntary programs.

Individual Kyoto parties are contemplating a wide variety of policy instruments to implement Kyoto, and different parties will almost certainly take quite different approaches to national implementation. In this respect, the Kyoto regime will be heterogeneous rather than harmonized.

Given this diversity in national implementation, U.S. transnational companies will need flexibility in their company-wide strategy to address their GHG emissions, regardless of whether the United States is a party to Kyoto.

U.S. companies that do business in other countries or that have foreign subsidiaries are already subject to different national laws, so Kyoto would not create a new type of problem. However, the variety of domestic policies and measures likely to be adopted under Kyoto would intensify the problem that transnational companies face in complying with different and potentially competing regulatory frameworks in different countries.

**National cap-and-trade.** Under a national cap-and-trade system, a Kyoto party could impose limits on the local GHG emissions of U.S. companies or their subsidiaries.

- If the United States were not a party to Kyoto, U.S. multinationals could not take advantage of low-cost emission reduction opportunities in their U.S. operations to meet these foreign emission reduction requirements, since Kyoto in its present form does not recognize emission reductions achieved in non-Parties. Instead, U.S. firms subject to emission reduction requirements in Kyoto Protocol parties would need to achieve these reductions within the territory of the Kyoto parties. (By the same token, foreign companies with operations within the United States would also be precluded from taking advantage of emission reduction opportunities in their U.S. operations.)<sup>2</sup>

- Many Annex B parties either have adopted or are considering adopting emissions trading systems, including Denmark and the United Kingdom (which have already adopted trading systems), and the European Union, Sweden, France, Germany, the Netherlands, Norway, Canada, New Zealand, Japan, Australia, Switzerland, and Slovakia (which are considering doing so). It remains unclear the extent to which Kyoto Protocol parties will seek to link their domestic trading systems with one another in order to allow international emissions trading under article 17 of the Kyoto Protocol. For example, some European Union sources indicate that the EU trading system will be purely internal and will not allow EU entities to engage in emissions trading with non-EU countries.
- Although the various national trading systems that have been proposed or adopted are quite different (including with respect to the gases covered, sources regulated, allocation methods and time frames), the EU directive would provide for some harmonization among EU member states. If European Economic Area countries follow the same rules, there could be 25-30 countries with domestic trading programs whose design is governed by the EU directive. Russia and the Ukraine do not need domestic trading programs, so this would leave only a few Annex B parties with domestic trading programs of their own design or with no domestic trading program.

**Other domestic policies and measures.** Other types of domestic policies and measures, such as a carbon tax, energy efficiency standards, or company or facility emission limits, could apply to the activities of U.S. companies or their subsidiaries in Annex B parties.

- Such domestic measures would affect U.S. companies in the same way regardless of whether the United States were a party to Kyoto, unless the domestic law in question allowed companies to earn a credit towards their domestic regulatory requirements through additional emission reductions in other Kyoto parties.
- U.S. failure to join Kyoto will, as a political matter, reduce U.S. leverage to influence domestic implementation by other countries. Even before the United States pulled out of Kyoto, U.S. firms were concerned about a Danish law restricting use of HFCs in refrigerators. Although the Kyoto Protocol does not provide a basis to challenge laws such as this (the only potential legal issue relates to the General Agreement on Tarrifs and Trade, or GATT), the United States was in a better position politically to engage with other countries about their implementation measures when it was still part of the Kyoto process.

## COMPETITIVENESS ISSUES

In general, Kyoto would give non-parties such as the United States a competitive advantage to the extent that Kyoto entails significant economic costs.

The costs of Kyoto – and therefore its general competitiveness implications – will be affected by several factors, including:

**Membership in the Protocol** - The U.S. decision to stay out of the Kyoto Protocol will reduce demand for permits and therefore tend to keep the international permit price low. This will lower compliance costs for the European Union and Japan to the extent they are able to rely on international emissions trading (and, in particular, surplus Russian allowances, which are likely to be inexpensive) in order to comply with their Kyoto targets.

**National implementation** - Regardless of whether the United States is a party to Kyoto, different approaches to national implementation could impose widely different costs.

- For example, if Europe and/or Japan choose to implement their targets at home rather than buy Russian allowances, this would raise their costs significantly. The same would be true if Russia decides to bank rather than sell its permits or to establish a sellers' cartel in order to raise prices.
- Reliance on inefficient regulatory standards rather than on market mechanisms such as emissions trading or carbon taxes would further raise domestic compliance costs, putting a country at a greater competitive disadvantage.
- Conversely, international and national reliance on market mechanisms would minimize economic costs. Some economic models suggest that, with the United States out of the Protocol, the European Union and Japan could meet their Kyoto targets at virtually no cost through reliance on international and national emissions trading, given the likely supply of surplus Russian allowances.

## Key role of national implementation

For particular sectors, the competitiveness implications of Kyoto will depend more on the absence of non-Annex B commitments and on how a country implements Kyoto than on U.S. non-participation. National implementation could shield particular sectors from any competitive disadvantage vis à vis firms in countries without emission reduction targets (for example, by exempting them from emission reduction requirements), or even give them a competitive advantage. For example:

**Subsidies** - If a country sought to promote cleaner fuels or energy efficiency through direct subsidies or tax breaks, then companies receiving these benefits (for example, producers of wind turbines, solar panels, or fuel efficient cars) could gain a competitive advantage vis à vis U.S. companies that do not receive similar subsidies.

**Grandfathering existing emissions** - Similarly, if a country allocated emission allowances to its companies for free (e.g., through grandfathering), then the allowances would be a kind of subsidy, particularly if firms were able to pass through the costs of compliance to their customers (e.g., through higher fuel or energy prices).<sup>3</sup>

**Sinks** - A country could seek to increase sink credits by subsidizing sink activities or giving individuals the credits generated from sequestration occurring on their lands. This would provide timber companies and farmers with an economic return on carbon-sequestering activities. Unless U.S. climate policy provided U.S. timber companies and farmers with similar credits, timber companies and farmers in Annex B parties would gain a competitive advantage vis à vis their U.S. competitors.

Kyoto does not restrict how a party may implement Kyoto domestically, and therefore would not prevent a party from implementing Kyoto in a manner that protects or benefits particular industries. However, subsidies for particular industries could be subject to challenge under the GATT and/or EU rules limiting anti-competitive subsidies.

## Boost for emission reduction industries

Some commentators argue that Kyoto will produce economic benefits rather than costs, by inducing innovation and giving industry in Europe and Japan a head start in developing new technologies to cut emissions. In the long run, they argue, climate change will require the adoption of emission-reducing technologies and "first movers" will gain an advantage in this technological transformation. Similarly, Kyoto could spur Kyoto-impacted companies to establish a business presence in developing countries in order to undertake CDM projects, which could ultimately result in better access to developing country markets.

This theory depends on the assumption that the market fails to promote cost-effective innovations and investment over the long-term, and that government pressure (in the form of regulation) is needed to induce companies to act in their long-term self-interest by developing new technologies or investing in developing countries.

Whether or not this theory is correct, to the extent Kyoto raises the cost of GHG emissions, Kyoto will benefit individual companies that provide technologies to reduce emissions – for example, companies that produce wind turbines, solar panels, nuclear power plants, or more energy-efficient products.

Since Kyoto does not restrict who can provide the investments and technologies that reduce emissions in Annex B parties, U.S. firms should in theory be able to compete to provide emission reduction technologies to those countries. (The issue of whether U.S. firms can participate in CDM projects is addressed below.)

## Participation in the Kyoto mechanisms

Kyoto will create an international market in GHG emission reductions from which private firms could potentially profit.

**Emissions trading** - In general, emissions trading would allow regulated companies to reduce their costs of compliance, but would not produce economic gains for regulated entities (unless the required emission reductions could be achieved through no regrets measures). The emissions trading rules adopted in Marrakech would not prevent U.S. companies from acting as financial intermediaries or brokers in facilitating emissions trades.

**CDM** - The Kyoto Protocol allows private entities to participate in CDM projects and thereby earn an additional return on projects that reduce GHG emissions or enhance sinks through the generation of certified emission reduction (CER) credits.

- Under the Marrakech Accords, U.S. companies will be able to participate in the CDM despite U.S. non-participation in Kyoto, since the rules allow developing countries to undertake unilateral CDM projects – that is, CDM projects that do not involve the participation of an Annex B party. As a result, a U.S. company could undertake a CDM project in conjunction with a host developing country.
- In addition, the CDM rules adopted in Marrakech do not specifically require that “operating entities” (firms or other entities that provide services such as review of baselines and verification of emissions reductions) be entities of Kyoto Protocol parties. Thus, U.S. firms could potentially serve as operating entities under the CDM.

**Joint implementation** - Despite U.S. non-participation in Kyoto, U.S. firms could compete for emission reduction projects in other developed countries. Although the U.S. firms could not directly receive the emission reduction credits generated from such projects, they could receive their monetary equivalent.

## Measures against U.S. Exporters

**Trade sanctions** - Conceivably Kyoto parties could try to use the Kyoto Protocol as a justification for imposing trade measures against non-parties. However, such measures would be problematic under the GATT and would not address the fact that non-Annex B parties and large seller nations such as Russia would all enjoy similar advantages.

- A Kyoto party that imposed a carbon tax as part of its domestic implementation might argue that a border tax adjustment was needed to compensate for the fact that non-parties such as the United States do not have a similar tax. In general, the GATT allows countries to impose border tax adjustments. However, such a tax adjustment would need to apply in a non-discriminatory manner to all countries that don't impose similar taxes.
- Annex B parties might argue that trade restrictions on goods from countries without comparable emission targets are necessary in order to make their own climate policies effective by preventing leakage (that is, the migration of production, and emissions, from Annex B parties to countries without targets). This paper does not address in detail whether a World Trade Organization panel would be likely to uphold attempts to use Kyoto as a basis to justify trade measures against countries without comparable emission targets. However, the existing WTO jurisprudence makes it quite difficult for a country to impose trade restrictions against goods on the grounds that those goods are produced in a manner that harms the environment.<sup>4</sup> Moreover, any restrictions would arguably need to be applied against all countries without emission targets (including developing countries), not just non-parties such as the United States.
- The European Parliament has already stated its view that the EU should launch an initiative in the WTO to prevent non-parties from gaining unfair competitive advantages, so the threat of trade measures against the United States is more than merely hypothetical.

**Consumer boycotts** - The opposition by the United States to Kyoto has already aroused public opinion, particularly in Europe, against the United States. Some environmental groups have begun to organize boycotts of U.S. companies that oppose the Kyoto Protocol. The efficacy of such boycotts is not yet clear.

**Labeling/certification requirements** - Unless U.S. companies accept Kyoto-like targets, they may also have difficulty raising capital from socially-responsible investment firms, and their products may not be able to receive certification as "green" products.

## U.S. DOMESTIC ACTION SCENARIO

If the United States were to adopt a domestic climate change policy involving significant emission reductions, this would tend to reduce or eliminate many of the implications discussed above, both good and bad, although the extent of this effect would depend on the specifics of the U.S. domestic policy as compared to the domestic policies of Kyoto Annex B parties.

If the United States were to develop a domestic cap-and-trade system, the U.S. decision to stay out of Kyoto could limit the ability of U.S. firms to meet their emission caps internationally, by precluding use of the Kyoto mechanisms.

- However, the United States could decide to recognize Kyoto emission allowances and credits for purposes of compliance with U.S. law. In that event, it would be up to each Kyoto Protocol party to decide whether to allow sales of its Kyoto permits to U.S. companies.
- If a Kyoto party wished to permit sales of its emission permits to a non-party such as the United States rather than use those permits for its own compliance with Kyoto, nothing in the Kyoto Protocol precludes it from doing so.
- Indeed, it would be quite difficult even for an individual Kyoto party to prevent U.S. firms from buying and using its emission allowances, since U.S. firms could simply establish a subsidiary in the Kyoto party (or could enter into a contract with a broker) to acquire and cancel allowances for U.S. compliance purposes. Kyoto parties would have difficulty preventing these strategies without creating problems for the operation of their trading programs.

To the extent U.S. emission targets were of comparable stringency to the Kyoto targets, this would tend to diminish or eliminate Kyoto's effects on U.S. competitiveness. However, the precise competitiveness effects would depend on how the United States and other countries implement their domestic targets. For example, if the United States policy focused on electric utility emissions, emission-intensive export (and import-competing) industries whose emissions were not controlled might still have a competitive advantage vis à vis companies in Kyoto parties whose emissions were controlled. Conversely, as noted above, Kyoto parties could choose to implement their targets in a manner that protects industries subject to strong international competition.

Strong U.S. domestic action might alleviate pressure in Europe to boycott U.S. companies or impose trade sanctions against them.

The principal remaining effect of U.S. non-participation in Kyoto would be loss of influence on the development of the Kyoto rules – an effect that could prove important should the U.S. decide to rejoin Kyoto later.

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<sup>1</sup> Annex B to the Kyoto Protocol defines the specific emissions reduction target of each developed country party to the Protocol.

<sup>2</sup> Even if the United States were to join Kyoto, whether U.S. multinationals could use emission reductions in the United States to comply with another country's domestic requirements would depend on the particular legal rules adopted by that party. For example, under Kyoto, a country could adopt a domestic cap-and-trade system that did not recognize emission allowances or credits from other countries (thereby effectively preventing firms from engaging in international emissions trading).

<sup>3</sup> The draft EU directive reveals an awareness of this potential problem and requires that the permit allocations by member states be consistent with state aid rules.

<sup>4</sup> The Montreal Protocol allows the parties to impose trade restrictions on goods produced with ozone-depleting substances, but the parties have not chosen to elaborate this provision.

