

Un kyoto protocol



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What is the Kyoto Protocol? The Kyoto Protocol is an amendment to the United Nations Framework Convention on Climate Change (UNFCCC), an international treaty intended to bring countries together to reduce global warming and to cope with the effects of temperature increases that are unavoidable after 150 years of industrialization. The provisions of the Kyoto Protocol are legally binding on the ratifying nations, and stronger than those of the UNFCCC.

Countries that ratify the Kyoto Protocol agree to reduce emissions of six greenhouse gases that contribute to global warming: carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, HFCs and PFCs. The countries are allowed to use emissions trading to meet their obligations if they maintain or increase their greenhouse gas emissions. The Kyoto Protocol sets specific emissions reduction targets for each industrialized nation, but excludes developing countries. To meet their targets, most ratifying nations would have to combine several strategies: * place restrictions on their biggest polluters * manage transportation to slow or reduce emissions from automobiles * make better use of renewable energy sources—such as solar power, wind power, and biodiesel—in place of fossil fuels

Background The Kyoto Protocol was negotiated in Kyoto, Japan, in December 1997. It was opened for signature on March 16, 1998, and closed a year later. Under terms of the agreement, the Kyoto Protocol would not take effect until 90 days after it was ratified by at least 55 countries involved in the UNFCCC. Another condition was that ratifying countries had to represent at least 55 percent of the world's total carbon dioxide emissions for 1990.

The first condition was met on May 23, 2002, when Iceland became the 55th country to ratify the Kyoto Protocol. When Russia ratified the agreement in November 2004, the second condition was satisfied, and the Kyoto Protocol entered into force on February 16, 2005. As a U. S. presidential candidate, George W. Bush promised to reduce carbon dioxide emissions. Shortly after he took office in 2001, however, President Bush withdrew U. S. support for the Kyoto Protocol and refused to submit it to Congress for ratification.

Rationale of UNFCCC and the Kyoto Protocol

The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

Concluding Remarks While international agreements such as the Kyoto Protocol are certainly a step in the right direction in that they raise awareness about the severity of global climate change, they are not a complete solution and will not solve the problem alone. Real results and improvements will be seen when fundamental reductions in energy consumption and changes in lifestyle are achieved on an individual level across the globe. Continue by reading about [What You Can Do to contribute towards reducing greenhouse gas emissions and improving your lifestyle.](#)

The Effectiveness of the Kyoto Protocol Kyoto Protocol has several provisions and established mechanisms concerning technology transfer which is supposed to favoring technology transfer for reducing the emission of greenhouse gases (GHG) in the world. However, mainly due to the flaws of the provisions and mechanisms, the environmentally sound technologies have not been transferred as smoothly as possible to realize the Kyoto Protocol's objectives.

Therefore, the international community shall take the effectiveness of Kyoto Protocol as a fresh impetus to consummate the legal system of international technology transfer, that is, developing a uniform technology transfer agreement under the WTO with a focus on promoting environmentally sound technology, which may make the developing countries to acquire the technologies they need under the fair conditions and help them build their capacities to develop in a sustainable manner. China does not need to perform the obligation of reducing GHG emission until 2013 according to Kyoto Protocol, but recations shall be taken to improve its legal systems on technology transfer to make preparations for implementing the policy of scientific development and playing roles in related international legislation.

Impact on Spain of Meeting the Kyoto Commitment in 2008-2012 Impact on Delivered Prices to Households and Industry Meeting the Kyoto Protocol target in 2008-2012 through a combination of domestic actions plus purchases of international credits would increase the price of home heating oil by more than 32%. Consumers would also pay more for gasoline and diesel.

If the Spain participates in the Kyoto Protocol's economy-wide emission reduction program, prices for industry would rise dramatically. Spanish industries would pay more than 42% more for natural gas and 24% more for electricity than under the baseline projection. Under the assumption that the Kyoto Protocol's emission targets are made even more stringent in the post-2012 period, the impact on household heating oil prices would rise to more than 43% above the baseline estimate by 2025. Gasoline and diesel prices would rise substantially, between 15-19% by 2025.

Impact on Energy Consumption In general, the percentage reduction in energy demand would not need to be as large as the required percentage reduction in carbon emissions because not all Btus of energy have the same carbon content. Additionally, purchase of international CO₂ credits means that foreign CO₂ reductions lessen the need for domestic reductions, thereby avoiding some domestic reductions in energy used. However, use of international credits does have consequences, as companies pass the cost of the international credit onto final consumers of energy via higher prices.

Implementation of a limit on carbon dioxide emissions via an international carbon dioxide allowance trading system would result in the following impacts. November 2005 Global Insight, Inc. Page 12 Domestic Sector: The dramatically higher energy prices would force consumers to cut their consumption of energy. Since there is only limited opportunity to substitute more energy efficient appliances and furnaces for the period 2008- 2012, consumers would reduce their consumption of energy services. Longer term, consumers would attempt to replace some of these services by replacing their energy consuming equipment.

Industry Sector: Industry would respond to the dramatically higher prices through several mechanisms. First, industry would reduce energy consumption through process change. Second, industry would replace energy-consuming capital with more efficient capital. Third, to the extent possible, production of energy intensive goods would move to non-participating countries. Power Sector: The power sector would be hard hit under these scenarios. The imposition of carbon permits would lead to extremely large increases in the delivered price of electricity, particularly to the industrial sector.

Imposition of ever decreasing carbon permit levels would set in motion dramatic changes in this sector. Coal use would decline, slowly at first and then rapidly, as the price drove electricity prices up reducing demand and encouraging the substitution of natural gas or renewables. Investment in natural gas fired generating capacity would alleviate some of the pressure on electricity prices, but with the ever increasing stringency of the target, investment in end-use efficiency would need to be as great or greater than improvements in power supply efficiency.

Transportation Sector: The impact on the transportation sector would be significant. However, due to the high taxes already in place on transportation fuels, the percentage change in price due to the addition of the carbon permit fees is less than the change in price in other sectors. Longer run, the permit price would have to be high enough to reduce energy use in this sector as the target tightens. Even assuming an international carbon dioxide emission allowance trading scheme, meeting the Kyoto targets would result in the following: ? Coal, with the highest carbon content of the energy

sources, would be the hardest hit. Petroleum would experience the smallest percentage decline of the fossil fuels because of strong demand and limited technology substitution options in the transportation sector over the forecast horizon. ? Natural gas demand would initially increase relative to the baseline as it is substituted for coal and petroleum but ultimately would need to decline as the cutbacks in demand outweigh this substitution effect. ? The demand for renewables would increase in all the cases. ? For this analysis, it was assumed that nuclear and hydroelectric energy would not change.

Economic Impacts Output and employment losses would be expected under the Kyoto Protocol because: energy-using equipment and vehicles would be made prematurely obsolete; consumers would be rattled by rapid increases in living costs; and financial ministers would most likely need to target more slack in the economy to deflate non-energy prices and thus stabilize the overall priceenvironment. The analysis assumes that the cost of emission allowances would be passed along to consumers in the form of higher energy prices and ultimately high prices for all goods and services.

Consumers' purchasing power would be reduced by the higher cost of using energy, reducing real disposable income. Consumption and residential fixed investment would be the hardest hit components of real GDP because of the direct loss in real disposable income. The short period to phase in the permit prices (2005-2008) would lead to substantial declines in real consumption from Base Case levels in the 2008-12 period. Imports would strengthen relative to Base Case levels, spurred by the competitive price advantage of non-participating Annex B countries, and non-Annex B countries. Real GDP would fall 3. % (26 billion Euros) on average below Base Case levels during

the 2008-12 budget period, and 4.3% (48 billion Euros) below in 2025 under Case 1 and 5.6% (63 billion Euros) below under Case 2. The economy's potential to produce would fall below Base Case levels initially with the cut back in energy usage, since energy is a key factor of production. Stronger investment would be required over the longer-term to build capital as a substitute for this lost factor. The decline in consumption and residential fixed investment relative to Base Case levels, however, would have a depressing impact on business fixed investment in the near-term.

Annual employment losses are projected to be 611,000 jobs in 2010 in the Spain. The percentage reduction in employment relative to Base Case levels would be less than the drop in output. This is due to an increase in the labor-to-output ratio (or a decline in labor productivity) attributed to the permit program. Labor productivity would decline because the other factors of production would be less efficient. Only as investment grows and the capital stock is expanded would productivity begin to improve.

Post 2012, if the target emission level under the Kyoto Protocol is maintained, the impact on economic performance would begin to lessen. The extreme change in the energy prices experienced during the years between 2008 and 2012 would not be repeated. While the percentage change in prices relative to the baseline would increase somewhat, the year-over-year change in prices would be reduced. However, achieving even more aggressive targets would take ever larger carbon fees, and would continue to take a significant toll on economic performance.

Reference

1. <http://www.studymode.com/essays/The-Kyoto-Protocol-Business-Ethics-202293.html>