

# The Kyoto Protocol

By *Daniele Luz*

Fossil fuels are the main source of energy in the world. It is well known that as nations industrialize and their population grows, so does its energy consumption. At present, more than six billion tones of carbon emissions are pumped into the air every year, despite a growing consensus that this contributes directly to climate change.<sup>1</sup> Will this situation be changed by the entrance into force of the Kyoto Protocol?

On last February 16, ninety days after Russia's decision to ratify it, the Kyoto Protocol became legally binding. It could only enter into force after meeting the requirement that nations accounting for 55 percent of greenhouse gas emissions had ratified the agreement.<sup>2</sup> Since the United States (world's major polluter) decided not to join, Russia's entry was vital for fulfilling the necessary conditions.<sup>3</sup>

The Protocol can have important effects on the future use of energy sources, especially because it sets gas emissions reduction targets for industrialized nations, the so called Annex 1 Parties.<sup>4</sup> In general, developed nations committed themselves to cut their emissions by 5.2 percent by 2012. Nevertheless, specific targets were agreed. The European Community nations, for example, are expected to reduce their emissions by 8 percent while Japan agreed with a target of 5 percent.

Several mechanisms were included to help the parties in achieving their commitments.<sup>5</sup> Emissions' trading, which works by allowing countries to buy and sell their quotas of greenhouse gas emissions, is the most well-known example: nations with high levels of gas emissions can buy unused "credits" from those who are allowed to emit more than they actually do.<sup>6</sup> Nations are also able to receive "credits" for activities which enhance the capacity of the environment to absorb carbon, such as foresting.<sup>7</sup> Emissions' trade is expected to create a financial flow which will benefit mainly developing nations. There is also an instrument called the Clean Development Mechanism (CDM), which has the objective of helping developing nations (non-Annex1 Parties) in achieving sustainable development.<sup>8</sup>

In spite of the intentions that involve the Protocol and its ultimate objective – curbing air pollution and global warming – many people are skeptical that it will really make a difference. Scientists who are confident of the relationship between pollution and global warming generally agree that, even if the Protocol is fully implemented, it would

---

<sup>1</sup> American Association for the Advancement of Science. See [www.atas.aaas.org](http://www.atas.aaas.org).

<sup>2</sup> See [unfccc.int/kyoto](http://unfccc.int/kyoto).

<sup>3</sup> 34 out of 38 industrialized countries have ratified the Protocol, the exceptions are the United States, Australia, Monaco and Croatia.

<sup>4</sup> The Annex 1 nations include: Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, European Community, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine and the United Kingdom. Turkey and Belarus, which are represented under Annex 1, do not face quantified emissions targets. See [unfccc.int/parties\\_and\\_observers/items/2704.php](http://unfccc.int/parties_and_observers/items/2704.php).

<sup>5</sup> See [unfccc.int/kyoto\\_mechanisms/items/1673.php](http://unfccc.int/kyoto_mechanisms/items/1673.php).

<sup>6</sup> See [unfccc.int/kyoto\\_mechanisms/emissions\\_trading/items/2731.php](http://unfccc.int/kyoto_mechanisms/emissions_trading/items/2731.php).

<sup>7</sup> See [news.bbc.co.uk/1/hi/sci/tech/3927813.stm](http://news.bbc.co.uk/1/hi/sci/tech/3927813.stm).

<sup>8</sup> See [unfccc.int/kyoto\\_mechanisms/cdm/items/2718.php](http://unfccc.int/kyoto_mechanisms/cdm/items/2718.php).

make a difference of only 0.2 Celsius degrees in average global temperature in a hundred year's time.<sup>9</sup> The consensus among many climate scientists is that, in order to avoid the worst consequences of global warming, emissions cuts in the order of 50% are needed.<sup>10</sup> Moreover, many people indicate that, without the support of the United States, the agreement is not useful. In addition, there is also doubt whether the nations which have ratified the Protocol will be able to meet its targets. Canada, for example, still does not have an action plan on how to decrease its emissions to the required levels.<sup>11</sup> Even Japan, whose ancient capital names the Protocol and whose authorities have been tireless supporters of the agreement, is struggling to find ways to meet its obligations.<sup>12</sup> There is also opposition to the fact that developing nations such as China and India, potential major polluters, are not required to meet specific targets. Critics indicate that the Protocol is too costly for its little practical results. From this point of view, a better way to spend the billions of dollars the Protocol will cost would be to invest in alternative technologies, such as renewable energy sources.

Still, there are many who believe the Kyoto agreement will have important effects, even if it is to symbolize a historical first step in the efforts to control global warming. As Joke Waller-Hunter, the Dutch chief of the treaty secretariat, stated: *"We have good reasons to celebrate. At the same time, we must realize that the Kyoto Protocol is not enough to deal with the problem."*<sup>13</sup>

---

<sup>9</sup> This opinion is shared by the "The Science and Environment Project". See [www.sepp.org](http://www.sepp.org) .

<sup>10</sup> UCLA International Institute. See [www.international.ucla.edu/article.asp?parentid=1900](http://www.international.ucla.edu/article.asp?parentid=1900) .

<sup>11</sup> See [news.bbc.co.uk/2/hi/science/nature/4267245.stm](http://news.bbc.co.uk/2/hi/science/nature/4267245.stm) .

<sup>12</sup> A recent report by the Japanese Ministry of Economy, Trade and Industry stated that 11 out of the 30 largest Japanese industries may face failure in achieving targets unless they take drastic measures. See [www.meti.go.jp/english/](http://www.meti.go.jp/english/) .

<sup>13</sup> See [edition.cnn.com/2005/TECH/science/02/16/kyoto.ap/](http://edition.cnn.com/2005/TECH/science/02/16/kyoto.ap/) .