

2011-09-13

PRESS RELEASE

The economic impact of the fight against climate change

(Article for the September 2011 Economic Review)

While the causes of climate change are still a topic of debate, most scientists believe that it is very probable that the changes are, to a material extent, the result of human activity. The (economic) consequences of rising temperatures are surrounded by even greater uncertainty. However, it is increasingly clear that inaction will have disastrous and in some cases irreversible consequences, and that, using international agreements, it is advisable to significantly reduce greenhouse gas (GHG) emissions on a global scale.

The first concrete targets for cutting emissions were set in 1997 under the Kyoto protocol and cover the period 2008-2012. Based on actual emissions in 2008-2009, it nevertheless appears that certain countries will have to put forth considerable effort to reach their targets for emission reductions. Furthermore, certain major polluters, namely the US, China and India, are not party to the protocol. No global agreement has yet been reached for the period after 2012. According to the European climate and energy package, the EU will cut GHG emissions by 20% compared with 1990 levels by 2020. If other developed countries were to make a similar commitment, the EU would raise its reduction target to 30%. Whereas Belgium is on track to reach its Kyoto target by 2012, numerous additional measures will be necessary to achieve the European climate and energy package goals.

Above all, a climate policy aimed at reducing GHG emissions must get producers and consumers to modify their behaviour. Authorities will use a combination of measures, taking into account not only their effectiveness, but also social considerations and corporate competitiveness. The principal measures studied in this article are tradable emissions permits, environmental taxes, industry standards, and promoting the development and spread of both significantly improved technologies and new technologies.

The Federal Planning Bureau and the EC have simulated, using econometric models, the macroeconomic consequences of the targets imposed by the European climate and energy package. These two institutions conclude that the necessary measures will weigh on economic activity, but that the consequences can be lessened if proceeds (from tradable emissions permits and environmental taxes) are used to stimulate the economy, notably through measures to lower labour costs or by providing financial support for R&D and innovation.

The principal way to reduce GHG emissions is to decrease energy intensity. Belgian industry has made substantial efforts in this respect; given the industrial specialisation in our country, significant further progress will not be possible at the current level of technology. However, it is still possible to substantially lower residential energy consumption and energy consumption for road transportation.

The energy intensity of economic activities cannot be reduced indefinitely. This is why it is important to increase the share of renewable energies in total energy consumption. Given Belgium's geographic and climatic characteristics, however, we do not have as wide a range of renewable power generation options as other countries. While this was accounted for when national targets were set under the European climate and energy package, Belgium will have to step up its efforts considerably to meet its target of 13% in 2020. The energy sources with the best potential for growth appear to be biomass and wind power.

It is clear that the fight against climate change will involve significant costs for the world economy. However, investments in developing low-carbon products and production processes offer opportunities in terms of innovation, economic activity, sustainable growth and employment. Energy efficiency is crucial to the competitiveness of the European and Belgian economies. Furthermore, it is to our companies' advantage to conquer the world market in eco-innovation as quickly as possible, taking their cue from several Belgian companies that are already key players in their niches. Thus, it is essential to strengthen collaboration among all of the parties involved in order to adopt a common vision that will propel us towards excellence.