‘What, you mean they were already talking about it back then?’, asked a genuinely surprised first-year student. And she followed it up with the - equally genuinely - indignant, ‘And they still haven't got anywhere!’.

The former next president sets the agenda

While the climate problem has been on both the scientific and the political agendas for at least 20 years, then, it is really only since the turn of the present century that it has become a public issue of the first order. There is no doubt that the film An Inconvenient Truth by the former American Vice President, former presidential candidate and Nobel Prize winner Al Gore has played an important role in this. The film, released in Europe in the autumn of 2006 in a blaze of marketing and promotional publicity, did indeed cause a great stir. Not only did Al Gore receive an Oscar for it, the film played a decisive role in
winning him the 2007 Nobel Peace Prize - I will come back to his co-laureate, the IPPC, in a moment.

In the Netherlands the film was shown in all the major cinemas for weeks on end. In Belgium it received extra attention when Margaretha Guidone, an ‘ordinary housewife’, organised a special showing of the film to which she invited all the country's leading political figures. In exchange for this mobilisation of politicians, or so it seemed, it was she rather than the minister who addressed the next international climate conference. The housewife as political crowbar and as a symbol of a different politics; but also, with all due respect, as a political alibi.

Nonetheless, there is no doubt that Al Gore's film did indeed have a major awareness-raising and mobilising impact. In my own town, Nijmegen, the alderman with responsibility for environmental issues arranged for all secondary school pupils to see the film. At the end of this series of screenings, he then invited a number of them to join a debate attended by the former Dutch secretary for the environment. A room full of 15-18 year-olds discussed the film with
great passion and energy. But the discussion centred mainly on what they could do themselves, what they could point out to their parents, and how all those small efforts could contribute to solving the climate problem.

Al Gore's film, which has since won a prestigious Oscar for best documentary, is indeed very well made. As a lecturer, you cannot help but be jealous of the sensitising effect that emanates from a PowerPoint presentation sprinkled with splendid film clips, and from the gripping montage of so many spectacular images focusing specifically on the consequences of climate change. Moreover, An Inconvenient Truth has established a new iconography in the climate debate: images from space showing low pressure areas which develop into spectacular cyclones; still-lifes of sad-looking polar bears on broken-off fragments of ice floes; hugely powerful hurricanes which devastate coastal towns; crumbling and collapsing blue-white icebergs; dried-out, barren steppes where agriculture is no longer possible...

Spectacular and impressive though Al Gore's contribution was, it could only be successful because other phenomena and reports had already drawn attention to the climate problem. Throughout Western Europe, including the Netherlands and Belgium, a succession of warm summers - with 2007 as the only exception in this first decade of the new century - played a role in this, with the extreme summer of 2003 being particularly notable. That hot summer led to an increase in the number of premature deaths throughout virtually the whole of Europe, especially among the elderly. In France, ‘la canicule de 2003’ resulted in some political embarrassment, because those additional deaths exposed the precarious situation of many elderly people, and above all the defective organisation of the health care system. But there are also other indications, and their number is increasing, that it is not just the weather, but the climate that is out of kilter; instead of around 800 mm of rain each year, the Low Countries now regularly have to absorb 1100-1200 mm; the number of rainy days has reduced, but the showers are shorter and heavier. From a scientific perspective, of course, all these individual phenomena cannot simply be ascribed to ‘the climate’. But the public are also aware that, since 1990, Flanders has been hit by more - and more serious - floods than at any time in the past, which have also affected areas where there had been no flooding in living memory. Other European countries - Austria, Germany, Romania, the United Kingdom, Switzerland and France - have all reported heavier rains and more flooding than in the past. And so climate change has become a highly visible phenomenon, even outside the cinema.

‘Knowledge is power’? Or: controversial knowledge as countervailing power?

It is precisely the number of indications that something is happening to the climate that prompted the United Nations and the World Meteorological Organisation to found the IPCC as long ago as 1988. The IPCC is a forum for climate experts from all relevant scientific disciplines and from virtually every country in the world, and it is affiliated to universities, private research institutes, non-governmental organisations, etc. This enduring co-operative effort by a series of agencies at global level is, no doubt, one reason why the IPPC was awarded the 2007 Nobel Peace Prize.
The IPCC is an unusual organisation for at least two reasons. In the first place, it fulfils two functions simultaneously, ensuring that the relevant scientific knowledge about climate change is kept continually up to date, while at the same time providing a platform for discussion on the most effective and efficient measures to counter climate change. The platform is only too well aware of this hybrid role between the worlds of science and politics; although it is not a political body, the IPCC's scientific reports are undoubtedly of major political significance. And although the IPCC is not a scientific foundation, in reality it does continually express value judgments on both current research and necessary new research. Precisely because of this position at the interface between politics and science, in the two decades of its existence the platform has developed a set of highly specialised rules to ensure the quality control of its reports and the decisions taken in relation to them. If the IPCC were to become too political, this could harm its scientific integrity; on the other hand, if it were to act too exclusively from the scientific standpoint, this would undermine the political relevance of its reports. Striking this balance demands special rules for quality control. This makes the IPCC itself special, and has set a trend which could also be useful in other controversial areas of knowledge and science both on a greater or smaller scale.

The word ‘scale’ itself refers to the second special property of the IPCC: that it functions as a global environmental, or at least a global climate, institute. In some quarters that scale and its impact are a cause of jealousy and suspicion. But it may be that the IPCC is foreshadowing the way in which the world will, and perhaps must, be governed in the future in several areas: by experts, admittedly, but experts from a range of disciplinary, geographical and social backgrounds, the quality of whose work will be subjected to close scrutiny and who will be held accountable for it. In any event, the IPCC occupies a special position in the gradual development of a growing number of these hybrid global organisations; bridgeheads for a world administration avant la lettre. And this latter reasoning seems to be a second, maybe even the most important argument for granting it the 2007 Nobel Prize for Peace.

Yet the expertise on the climate issue has occasioned controversy from the start, and still does. That is due in the first place to the fact the climate is such a complex system, and so can not be adequately pinned down and described using simple mathematical functions. Consequently there are many scientific uncertainties, both as regards the observed phenomena themselves and their interpretation, and as regards their causes and consequences. Do our series of temperature measurements really go back far enough to enable definite conclusions to be drawn? Is the climate change that the world is currently experiencing really essentially different from the fluctuations that have always characterised the climate? Is human intervention, with its enormous discharges of greenhouse gases into the atmosphere, headed by CO₂, really the cause? Alternatives put forward by those who believe that the human impact is overstated include volcanic eruptions, sun spots and other suggestions. None of these, however, have yet been confirmed; on the contrary. And can the ‘consequences’, such as increased rainfall and flooding, really be attributed to climate change? Even the clearly increased frequency of hurricanes and other spectacular phenomena, let alone Hurricane Katrina, which devastated New Orleans, cannot be linked directly to climate change - just as it is impossible to derive statistically relevant conclusions from other individual incidents. And if
the phenomenon itself is so little understood, its causes and its consequences so uncertain, why take measures? Why develop climate policy?

Social and political exploitation of scientific uncertainty is nothing new. On the contrary, in the debate on many environmental problems we can recognise the pattern of the debate with Laocoon about the Trojan Horse. Laocoon urged the Trojans not to trust the Horse, claiming it would destroy Troy. He was not believed, even though he was right. Nuclear energy, genetic modification (GMOs), mad cow disease (BSE), non-ionising radiation and any number of other controversies present examples of the repeated use and exploitation of scientific uncertainty as a weapon in what is in essence a political debate. The climate debate takes this to a new level: from the very start some people, both scientists and non-scientists, have cast doubt on and attacked both the IPCC's dominant position and its diagnoses. Basic data have been disputed, observations distrusted, minor uncertainties exaggerated, the relative reliability of mathematical models extrapolated, the natural changeability of the climate system has been stressed and the role of human activity minimised. In short, there has been a systematic sowing of the seeds of doubt: if there really is a climate problem, and if the climate is changing, is that change not mainly attributable to factors other than our greedy, energy-devouring and CO₂-emitting economy?

It is absolutely right that scientific findings should constantly be subjected to critical scrutiny. Scientists are not infallible: they too can be collectively wrong. But in the climate debate, there is reason to doubt the scientific motives of some 'non-believers’, allied as they often were and are to think tanks which have everything to gain from a limitlessly growing economy and which had and have little time for issues such as poverty, development and justice. The Bush administration took much of its inspiration from these doubters in its rejection of the Climate Treaty, or at least its reworking of the Treaty to produce the still very conservative Kyoto agreements (1997). This standpoint is inspired much more by colossal economic interests than by scientific uncertainty: the interests of the oil companies, of the energy sector in general, of the automotive sector, of the aviation industry, of the transport sector in general; in short, the pillars that support the present-day economy.

Climate change in the Low Countries: all challenges for policy-making represented

Not only did the US government refuse to sign the Kyoto Protocol; it continues to frustrate further progress in tackling the climate problem in other ways, too. We could witness that strategy very recently at the Bali climate conference. But refusal and direct attack have now made way for a much more subtle strategy of counter-movement. For example, the USA has joined forces with Australia, China, India, South Korea and Japan to create the Asia-Pacific Partnership on Clean Development and Climate. In January 2006 these countries - bear in mind that together they represent almost 50% of the world's population and nearly 40% of all global CO₂ emissions! - issued a declaration. Although the declaration does mention the climate problem, heavy emphasis is placed on the scientific uncertainty. As a result, in their declaration these countries agree that neither measures to tackle climate change nor a timeframe for doing so are necessary.
It is difficult to formulate policy to deal with a global problem if half the globe does not take part. This is a problem for Europe as a whole, which is making valiant efforts to take the lead in climate policy. It is also *a fortiori* a problem for the Netherlands and Belgium. Both countries make a sizeable contribution to global emissions of greenhouse gases, with CO₂-equivalent emissions of around 200 million tonnes and 150 million tonnes respectively. They do this through their domestic economic activities, especially energy generation, industry and transport, as well as through the ecological footprint they leave behind through all kinds of activities in other countries. At a European level, both countries naturally make a smaller contribution in absolute terms to the greenhouse effect than Germany (20%), the United Kingdom (13%), Italy (12%) and France (11%). However, on a per capita basis the Netherlands and Belgium score well above the European average. So something certainly needs to be done.

In the autumn of 2006 the authoritative economist Sir Nicholas Stern submitted an important report to the British government, and via the government to the EU, the OECD and the entire world, in which he discusses the importance, costs and timing of the policy efforts that are needed. Briefly summarised, Stern's report contains an economic calculation of all the costs of climate change, a cost-benefit analysis of all the measures to be taken, and an indication of the measures which are most appropriate economically. Whilst fully taking on board the uncertainty and the need for caution, Stern argues that it is more cost-effective to take measures now than to delay them. After all, the costs quickly mount up, and some weaker economies will barely be able to afford them. Although unquestionably duller than Al Gore's film, Stern's 700-page report thus makes its own contribution to placing the climate issue on the agenda, albeit mainly that of the political and administrative world.

A substantial body of policy has been and is being developed and implemented. Like everywhere in Europe, the two Low Countries developed and approved climate policy plans and programmes in the 1990s and in the first few years of the present century. Some of them relate to the potential impact of climate change. It will come as no surprise that the Netherlands, a country with a third of its land mass below the present sea level and lying in the delta of three major rivers, and which therefore has a host of measures to protect itself against the water both along its coasts and inland, devotes a great deal of attention to removing surplus water and to the rise in sea levels. The low-lying regions of Flanders are also susceptible, but here, despite the recent floods, this increased risk from the water has so far not had the same impact in terms of new policy and additional funding.

Much trickier are the measures designed to address the causes of the problem. From a policy perspective, the climate problem is entirely different from that other global environmental problem, the depletion of the ozone layer. There, the focus was on just a few specific products, which were made by a small number of companies and for which moreover substitute products could be found reasonably quickly and easily. With the climate problem, apart from a small number of specific greenhouse gases, such as nitrous oxide and to a lesser extent fluorinated gases, key culprits are methane gas and, with a (still growing) contribution of between 80% and 90%, the much more important CO₂. This gas is released into the atmosphere in all combustion processes - and therefore in many energy generation processes, virtually all industrial processes and virtually all transport activities. This means that a transition to a
low-carbon economy or, as a very modest first step in that direction, breaking the link between economic growth and increasing CO$_2$ emissions, is a very drastic and complex process. The problem is literally everywhere, and equally literally it is an intrinsic part of our present-day economy and technology.

As we have said, the global context is anything but favourable for the development of a European, let alone a Dutch or Belgian or Flemish climate policy. In addition to the foregoing, since the terrorist attacks of September 2001 throughout the world attention has been diverted from the environment in favour of the ‘war on terror’ and everything that goes with it. This has also been the case in the Netherlands and Belgium: it is no coincidence that since 2002 and 2003 in both countries, with some time difference due to the local political cycles, governments have taken office which accord little priority to environmental issues and which have appointed weak ministers for environment policy. Politicians have also made things difficult for themselves by following another global trend, which has also affected the Netherlands and Belgium, namely the wave of privatisation, precisely in the energy sector, formally endorsed by Europe at the request of the companies concerned and with the support of the politicians of the day. The combination of a weak environment policy and a strongly liberal energy policy has led - and the statistics support this - on the one hand to the government scrapping a number of incentives for environmentally-friendly energy production, while on the other hand the privatised energy producers had little appetite for uncertain investments in a notion such as sustainable energy
production. The contribution to the total energy supply from non-fossil fuel sources has consequently fallen well short of both targets and expectations.

Of course the energy and climate programmes in both countries look attractive. And of course, they provide for a broad arsenal of instruments designed to bring about a gradual transition to lower-carbon energy production in several economic sectors and to an overall reduction in energy consumption. The measures put in place comprise, firstly, the endorsement of increased production of sustainable energy, be it wind, solar or other energy. The policies comprise, secondly, a series of measures to encourage more energy-friendly technology in a variety of production processes, ranging from agriculture to industry and from transport to services. And, thirdly, the policy is to encourage consumers, citizens, car drivers and all of us to restrict our energy consumption. But of course, too, the implementation of these fine plans immediately runs into delays. First, and perhaps least important, are administrative reasons; more importantly, these plans are out of step with the long-term investment programmes of the companies concerned; and even more important are the delays due to the vested economic interests which may in principle support the need for a transition to a different form of energy supply but - of course - not at the cost of their own position in that field. The ambivalence of measures to increase the price of diesel, to name just one example, or to increase the price of flying, to name another, illustrates the policy dilemma our economy faces. The shortfall in investment in new energy technology is just one more example, though one of considerable importance.

In short, climate policy exhibits all the dilemmas of policy-making at the present juncture: the policy has to be global, but the political system remains largely national, and therefore operates on a relatively ineffective scale. The policy has to be long-term, but politicians tend to be extremely short-term in their thinking - a not very effective timescale. The policy has to be fundamental, but the government has deprived itself of room for manoeuvre in many areas, including precisely those areas where contrat is needed.

The answer to that first-year student's question, 'you mean they were already talking about it back then?', was short: 'yes'. The answer to her second question was lengthier, and perhaps a little depressing: first the disaster, and only then believe the one who predicted it? The metaphor of what happened to Laocoon - strangled by snakes after his warning - offered an escape route which was, if not politically, at least aesthetically satisfying.