



**TRANSATLANTIC PLATFORM FOR ACTION ON THE GLOBAL ENVIRONMENT (T-PAGE)<sup>1</sup>**

**EU and US Public Perceptions of Environmental, Climate Change and Energy Issues**

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## 1 INTRODUCTION

Government responses to climate change on both sides of the Atlantic have been very different. The European Union (EU) and its Member States have been strong political supporters and promoters of the Kyoto Protocol and are keen to depict themselves as the world's leader in climate change policy. On the other hand, the US is the world's largest emitter of greenhouse gases; however the Bush administration did not submit the Kyoto Protocol to the Senate for ratification, a necessary step for the Protocol to be binding in the US. Therefore, the non-binding status of the Protocol in the US and the current Administration's continuing refusal to commit to binding emission reduction targets, keeps the US as an outlier in the international process. 'Differences in public opinion are often used to explain, if not justify, differences at the governmental level' (Reiner et al, 2006) and public policy decisions that do not take into account public opinions will inevitably prove problematic. Climate policies require a certain degree of 'buy-in' or public acceptance in order to be successfully implemented and should be in line with public perceptions of the risk of climate change in order to be supported by the electorate (Lorenzoni and Pidgeon 2006).

Consequently public perceptions of environmental issues in general and climate change in particular have long been of interest to researchers and policy makers. In the EU, for example, *Eurobarometer* (a regular public opinion survey conducted across the EU on behalf of the European Commission) has published a number of surveys of citizens' views in this area periodically since 1992. In the US, several polls including the Gallup Poll, Harris Poll, and the Pew Surveys include questions related to the environment and global warming. In addition, numerous academic studies, public consultations and consultants' reports on both sides of the Atlantic have explored public perceptions of specific climate change mitigation technologies such as bioenergy and Carbon Capture and Storage (CCS) and compared changes in public opinion over time. It is therefore possible, and potentially illuminating, to consider whether the different approaches being taken by the US and EU in their climate and energy policies reflect a broader difference in public concern for these environmental issues as well as a differing level of support for environmental policy.

This paper, therefore, examines the public opinions of the EU and US public towards the environment, and climate change in particular, and explores how they vary across time and space within each of these jurisdictions. First, the public perceptions of citizens across the EU Member States will be explored and in the second part of the paper, US public perceptions of these issues will be investigated. In both cases the views on the environment in general, as well as climate change in particular, will be assessed. The implications of these views on policy making in each jurisdiction will then be assessed. In the final and concluding section of this paper, the similarities and differences in EU and US public perceptions will be discussed in general as well as in light of the different governmental approaches taken. It is important to note the limitations of survey data and the difficulty in directly comparing different surveys, given their varying approaches to questioning, articulation of questions, timeframes and geographic scope. However, this analysis of certain public surveys in the EU and US allows us to identify certain trends in public opinion over time and make some tentative comparisons.

## 2 EU PUBLIC PERCEPTIONS

### 2.1 Public Opinions of Environment and Climate Change

The environment is an important issue for the European public. The most recent *Eurobarometer* survey of public opinions on the environment commissioned by the Environment Directorate General (DG) within the European Commission and conducted at the end of 2007; showed that an overwhelming 95 per cent of European citizens felt that it was important to protect the environment (CEC 2008). The top six environmental issues Europeans were most concerned about were climate change (identified by 57 per cent of respondents), water pollution (42 per cent) and air pollution (40 per cent), man-made disasters such as major oil spills or industrial accidents (39 per cent), the impact on health of the use of chemicals in everyday products (32 per cent), and natural disasters such as earthquakes and floods (32 per cent) (see Figure 1).

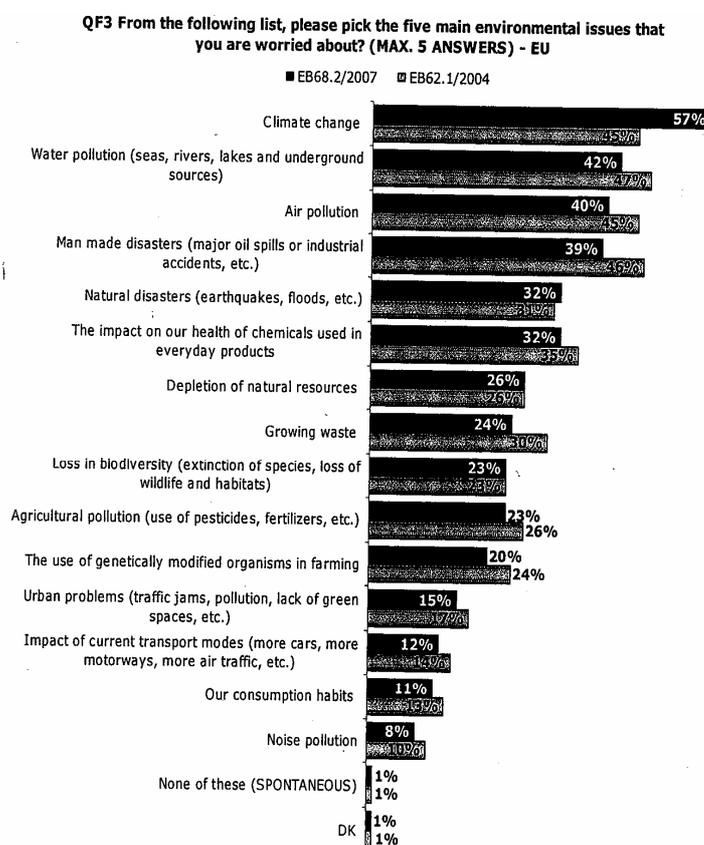


Figure 1: The Top Environmental Concerns of EU Citizen's identified in Eurobarometer Surveys in 2007 and 2004 (source CEC 2008).

Opinion with regards to the environment and climate change was not, however, uniform across all Member States. For instance, the *Eurobarometer* survey showed that there appears to be a geographical split between the new and old Member States over what is commonly understood as the 'environment'. In the 15 old Member States 21 per cent of respondents associated the environment with more contemporary environmental problems such as climate change, compared to only 9 per cent of the respondents in the 12 new Member States. For these respondents in the new Member

States the environment was more commonly associated with more traditional conceptions of the environment such as ‘green and pleasant landscapes’ (21 per cent) and ‘protecting nature’ (18 per cent) (compared with 21 per cent and 11 per cent respectively in the old EU 15)(CEC 2008).

In addition, the concern of the European public about the environment appears to be increasingly focussed on climate change. In a similar survey in 2004 climate change was identified by only 45 per cent of the respondents as a top environmental issue (compared with 57 per cent of respondents in the most recent survey) and of less concern than water pollution and man made disasters. Thus, while at first the uncertainty and complexity surrounding climate change was reported to hamper efforts to raise its profile both with the public and politicians (Lowe *et al* 2005), it is evident that in Europe this picture is now changing. In particular, the survey showed that the level of concern about climate change is highest in the Southern Member States with people in Spain, Cyprus, Malta and Greece the most worried.

## **2.2 Public Awareness and Understanding of Environment and Climate Change**

The public’s perception of environmental issues is of course affected by the extent to which they feel informed about these issues. Low levels of knowledge and understanding will be insufficient to ensure informed public opinion (McGowan and Sauter 2005). The most recent *Eurobarometer* survey showed that a small majority of Europeans felt informed about the environment (55 per cent). However, only 5 per cent felt *very well* informed whereas 42 per cent felt that they were badly informed. There has been an apparent rise in the global debate on environmental issues such as climate change in the media in recent years. This has culminated in the 2007 Nobel Peace Prize being awarded to advocates for change in this area namely the Intergovernmental Panel on Climate Change (IPCC) and the environmental activist Al Gore, ‘for efforts to build up and disseminate greater knowledge about man-made climate change’. Despite this Europeans do not appear to feel more informed on these issues than in the past surveys. However, it is clear that respondents in the old EU 15 Member States felt significantly better informed than respondents in the 12 new Member States (59 per cent compared to 44 per cent respectively).

The survey found that the main area in which respondents felt that they lacked information was climate change which was identified by 36 per cent of the respondents. This was substantially increased from the previous survey in 2004 when it had only been identified by 26 per cent of the respondents. More specifically, a *Eurobarometer* survey published in 2003 focusing on ‘Energy: Issues, Options and Technologies’ found that there were mixed levels of understanding about the way in which energy was used and which energy sources were used (CEC 2003). The survey demonstrated a clearer perception of rising energy use in the EU and of the possibilities for energy savings. However, while the majority of respondents in this survey agreed that fossil fuels were a major contributor to global warming, almost half believed nuclear power was also a contributor.

In addition, various studies show that there can be confusion in the public understanding of the term ‘renewable energy’. In particular, a study conducted by the UK government revealed that the public seemed more familiar with discussing particular renewable energy sources such as wind, solar etc than the abstract term (TNS Plc 2003). Of these sources, there was a higher knowledge of solar, hydro and

wind compared to biomass. However, the knowledge about renewables was greater if respondents lived nearby a renewable energy project (*ibid*).

### **2.3 Public Opinions of Climate Technologies**

There appears to be a correlation between knowledge of a specific technology and a positive opinion/ general approval of it (TNS Plc 2003). This is leading to an apparent contradiction that even though concern for climate change is rising in the EU, adverse public perceptions are still seen as a key barrier to the development of some 'climate friendly' technologies in certain areas of the Union.

For example, awareness of bioenergy is very low (2 per cent in a study in Ireland and 8 per cent in one in the Netherlands) (Thornley and Prins 2008). A study in the UK found that while 85 per cent of respondents wanted to increase renewables only 16 per cent supported biomass with nearly 5 per cent opposed, the vast majority just did not know about it. Therefore, while local people accept the need for renewables, they often do not accept the need to build the necessary facilities locally. However the situation in some Member States is more optimistic. Bioenergy is well established in Sweden where public perception is not an issue due to the longstanding use of waste from the paper and pulp industry to produce energy.

Similarly, the majority of the general public have limited knowledge of the relatively new (and still developing) technology of Carbon Capture and Storage (CCS) and so either have no opinion on this technology or are somewhat sceptical (Shackley *et al* 2004). However, it appears that once (even limited) information is provided on the role of CCS in reducing CO<sub>2</sub> emissions to the atmosphere, opinion tends to shift towards slight support for the concept. This is particularly true if CCS is seen as one part of a wider strategy for achieving significant cuts in CO<sub>2</sub> emissions or as a temporary/bridging role until long-term alternatives are developed. As a stand alone option, there is evidence that the public feel that CCS might delay more far-reaching and necessary long-term changes in society's use of energy (Shackley *et al* 2004; ICF International 2007).

In some Member States a significant sector of the public reject wind turbines in their local area. A study for the UK government in 2003 found that about one fifth of the British general public were against wind farms in their local area, mainly on esthetic grounds, while 28 per cent would strongly approve it (TNS Plc 2003). This opposition has in general led to problems with local planning procedures in the UK and to the government considering expensive plans to site large scale wind farms off shore. This negative perception of wind turbines is not, however, the case in all Member States and for instance Germany and Portugal have numerous wind turbines situated on land and even close to recognised areas of natural beauty. There is some evidence in the UK that wind farms can receive a more positive consideration in remote areas, where they also offer direct local benefits such as jobs, and also after respondents have actually seen a wind farm (*ibid*).

By comparison to other low carbon technologies, the levels of support for nuclear power have been relatively low in many Member States such as Germany and the UK which have been phasing out nuclear power stations or at least have not built new ones for some years. An opinion poll in the UK conducted by Ipsos MORI, however, shows a significant increase in support for new built nuclear power stations in the UK

in recent years (Ipsos MORI 2007). In 2001 they report that only 20 per cent of the UK population supported the building of new nuclear power stations to replace those being phased out compared to around 60 per cent who were opposed. By mid 2007 they report that this had changed to 35 per cent support and 29 per cent opposition (*ibid*).<sup>2</sup>

The apparent redemption of nuclear power in the minds of some UK citizens may be due to links being made between nuclear energy and climate change mitigation in the recent UK political agenda and media coverage. A study by Poortinga *et al* (2006) demonstrates that people interpret nuclear energy in a rather more ambivalent or even positive way when it is positioned alongside climate change. However, few of their participants actively and wholeheartedly supported climate change mitigation through new nuclear build as an acceptable policy position (*ibid*). In contrast, the attitude to nuclear power is apparently much higher in France where its use is much more wide spread. A 2001 Ipsos poll found that 70 per cent of the French population had a ‘good opinion’ of nuclear energy in France and 63 per cent wanted their country to remain a nuclear leader (Embassy of France in the US 2001).

#### **2.4 Public Perceptions of Environmental Policy**

The public’s views and values on the environment have important implications for policy. It would be difficult for policies to be made and implemented which did not hold the general support of the public. However, neither should governments be discouraged from showing leadership for steering society towards long term solutions to environmental problems. Indeed, it is apparent from the recent *Eurobarometer* survey that the European public is highly supportive of EU leadership to help tackle environmental issues, especially since, although they feel willing to act individually, they are apparently yet unable to do so.

This recent *Eurobarometer* survey showed that while 86 per cent of EU citizens saw themselves as having a role to play in protecting the environment as individuals, their green attitudes did not always translate into concrete actions (CEC 2008). On average the survey revealed that a European citizen had done only 2.6 things for environmental reasons in the past month. A large number (59 per cent) had separated their waste, followed by nearly half (47 per cent) who indicated that they had cut down their energy consumption and over a third (37 per cent) who had cut down their water consumption. All of these choices were considered to be linked to the citizens’ everyday life and somewhat ‘passive’ (*ibid*). More ‘active’ choices which could be more directly linked to environmental concerns were even rarer. For example, while 75 per cent of respondents said that they were ready to buy environmentally friendly products even if they were more expensive, only 17 per cent had actively done so in the last month.

On the other hand the survey revealed that EU citizens felt that the best way to tackle climate change and energy-related issues was at an EU level. Two-thirds (67 per cent) of European citizens preferred environmental decisions to be made jointly within the EU. Environmental policy actions at the EU level were widely encouraged in every

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<sup>2</sup> However, McGowan and Sauter (2005) in their review of public opinion surveys in the UK that opinion on the future nuclear construction varied considerably according to different polls and surveys.

country and 82 per cent of respondents agreed that European environmental legislation was necessary and 80 per cent believed that the EU should assist non-EU countries to improve their environmental standards.

Further to this, the European Commission claimed that the survey also showed that Europeans do not see environmental legislation as a threat to the EU's competitiveness agenda. Nearly two thirds of Europeans in the survey felt that protecting the environment was more of an incentive to innovate (63 per cent) than an obstacle to economic performance (16 per cent). In addition, two thirds (64 per cent) of respondents felt that protecting the environment should be given priority over economic competitiveness. Indeed, 78 per cent of respondents would have accepted increased EU funding for environmental protection even if it came at the expense of other areas. However, *which* other policy areas should be subordinate to environmental protection was not specified. Other studies have found that the importance of climate change was in fact secondary in relation to other personal and social issues such as health, family, safety and finances (Lorenzoni and Pidgeon 2006). Therefore, it is possible that the responses to *Eurobarometer's* question may have been different if the question had been phrased differently and/or hard choices had had to be made.

### **3 US PUBLIC PERCEPTIONS**

The American public has become increasingly aware of the threat of global warming as a consequence of the extreme weather patterns they have experienced in recent years as well as more frequent domestic media coverage of the issue. This increased concern is reflected in the more prominent role environmental issues are playing in the ongoing election campaign. However this increased public awareness has yet to be reflected in official government policies at the Federal level which continue to lag behind and frustrate international efforts to tackle climate change.

#### **3.1 Public Opinions of Environment and Climate Change**

There has been a significant increase in public concern about global warming in the US. A comparison of the results of two surveys, carried out in 2003 and 2006, indicates that the percentage of the American public that ranked global warming as the top environmental priority tripled between 2003 and 2006 (MIT LFEE 2006). A *New York Times / CBS News Poll*, conducted in April 2007 (New York Times 2007), indicates that over 90 per cent of the 1052 people surveyed considered global warming to be a serious or very serious problem. 52 per cent of those surveyed state that global warming should be one of the highest priorities for government leaders, while 78 per cent of those polled maintained that action to counter the effects should be taken immediately. Americans are typically portrayed as being economically focused, however, when asked about the trade-off between stimulating the economy and protecting the environment, 52 per cent of respondents said that the environment should take precedence (compared to 36 per cent which supported the economy). A recent Gallup poll conducted in March 2008, indicates that Americans continue to favour protection of the environment even at the risk of reducing economic growth – a

finding which is particularly pertinent given the impending recession in the US and global economy (Gallup 2008).

These results were reflected in another poll undertaken in the same time period by the *Washington Post*, *ABC News* and Stanford University (Washington Post 2007) which surveyed a nationwide sample of 1002 adults. Global warming / greenhouse effect / climate change is considered by 33 per cent of the sample to be the single biggest environmental problem being faced by the world; this is double the number who ranked it as the top environmental problem in the same poll carried out in 2006. The next biggest environmental problem is considered to be air pollution (by 13 per cent of the sample in both 2006 and 2007). 52 per cent of the sample said that global warming was important to them personally, with 18 per cent saying that it was extremely important to them.

While the US public's concern over global warming has risen to the top of the list of environmental issues, it is still not considered a major national priority. A 2006 survey sponsored by MIT (MIT LFEE 2007) indicated that the main concerns of the American public continue to be terrorism, foreign policy, health care and the economy. Comparing results to a similar survey carried out in 2003, concern about the environment grew slightly but continued to rank in the middle range of all the national issues listed (*ibid.*). The most recent survey undertaken by the Pew Research Centre in February 2008 among a sample of 1,508 adults (Pew 2008), indicates that developing new sources of energy was considered by the majority (54 per cent) of those surveyed to be a more important priority for the country than protecting the environment. Thus while there has been a growing concern for environmental issues, this continues to be over-shadowed by other issues considered to be of higher national importance.

### **3.2 Public Awareness and Understanding of Environment and Climate Change**

The American public is typically more sceptical of the science behind climate change. In the 2007 *Washington Post* poll, 56 per cent of the sample believed that there is still a lot of disagreement among scientists on the issue of whether or not global warming is happening. This public doubt over the scientific consensus behind global warming, which in general terms has been declining, is contrasted by growing evidence of the effects of climate change. In the 2007 *New York Times* poll, 75 per cent of those surveyed recognise that weather patterns over the past few years have been 'stranger than usual', of this group 43 per cent recognised that this peculiarity was due to global warming, with only 11 per cent saying it was part of the natural cycle. Furthermore, 41 per cent of those surveyed felt that the rise in world temperatures is being caused 'mostly by things people do'. Regarding their knowledge of global warming, 51 per cent of the sample felt they knew a 'moderate' amount about the issue, with 37 per cent admitting they knew little/nothing about it.

In the 2007 *New York Times* poll, 89 per cent of the sample had heard or read of the term global warming (42 per cent has heard a lot about it, while 47 per cent had heard something about it), with 21 per cent of the sample agreeing that the release of greenhouse gases is the most important factor causing global warming (while 62 per cent thought greenhouse gas emissions were one among many factors). Given the popularity of Al Gore's documentary 'An inconvenient truth' in other parts of the

world, and the international recognition of his efforts through the joint awarding of the Nobel Peace Prize in 2007, 82 per cent of those surveyed had not seen this movie.

In analysing public understanding and knowledge of CO<sub>2</sub> sources and sinks, the two MIT surveys provided a list of technologies and natural resources and asked about the CO<sub>2</sub> emissions / reductions of each. In both 2003 and 2006, the public seemed to understand that automobiles, coal burning power plants and factories were significant sources of CO<sub>2</sub>, while they were more unsure of the impacts of nuclear power plants and oceans.

Thus while there has been an increased recognition of the problem of global warming, and the fact that human activities are in part responsible for this increase in temperatures, there appears to be little understanding of the underlying carbon cycle and detailed knowledge of global warming appears limited.

### **3.3 Public Opinions of Climate Technologies**

The two MIT surveys also attempted to analyse changes in the public's awareness of the technologies available to address global warming from 2003 to 2006 and included questions on whether or not participants had heard or read about certain environmental and energy technologies. While the majority of those surveyed in both 2003 and 2006 had at least heard of hybrid/efficient cars, renewable energy technologies and more efficient appliances, hardly any had heard of carbon capture and storage or carbon sequestration, while very few had heard of bioenergy/biomass. The results of the survey also indicated that respondents were unclear of the environmental problem carbon capture and storage aimed to address.

In the 2007 *New York Times* poll, 48 per cent of those surveyed considered using coal to generate electricity 'mostly a bad idea' compared to 43 per cent that considered it to be 'mostly a good idea'. 87 per cent of the sample considered using renewable energy sources to generate electricity 'mostly a good idea' while only 9 per cent though the use of renewable energy sources was 'mostly a bad idea' agreeing with the statement that they are costly and unreliable. 70 per cent support the use of ethanol as a substitute for foreign oil and 58 per cent of the sample thought the use of nuclear power to generate electricity was a 'bad idea' given the associated risk and the issue of waste disposal. The 2008 Pew survey indicates that the public remains divided over the issue of nuclear power, with 44 per cent favouring government policies that support nuclear power and 48 per cent against it. 57 per cent of those surveyed also support increased federal funding for ethanol research, a fall of 10 per cent from 2006.

Despite increasing awareness of the issue of global warming, public knowledge of the most appropriate technologies to address the issue remains limited.

### **3.4 Public Perceptions of Environmental Policy**

The above analysis of opinion polls indicates that the American public is increasingly more concerned with global warming, which is reflected in a significant increase in public support for action to address climate change. In the 2006 MIT survey, the majority of those surveyed felt that the scientific evidence available warrants action,

representing a significant increase in support since 2003. The two surveys also revealed that the public's willingness to pay to 'solve' global warming increased by 50 per cent between 2003 and 2006. However, a question included in the 2006 survey to assess the public's willingness to pay a revenue-neutral carbon tax, was supported by a third of the sample and opposed by another third, with more respondents strongly opposing the proposal than those that strongly supported it.

In the 2007 *New York Times* poll, 63 per cent of those polled agreed with the statement that 'protecting the environment is so important that requirements and standards cannot be too high and continuing environmental improvements must be made regardless of costs'. With 64 per cent stating that they would be willing to pay higher taxes on fuels to fund research into renewable energy sources and 75 per cent stating they would be willing to pay more for their electricity if it was generated from renewable sources, and thereby would help to reduce global warming. However, when asked whether they had purchased specific products that were good for the environment, although being more costly, only 6 per cent of the sample answered that they had purchased a hybrid / fuel efficient car, 18 per cent had purchased environmentally-friendly household products while 45 per cent had done nothing. 57 per cent said that they did not car pool to work while 61 per cent stated that they did not take public transport. Furthermore, 92 per cent of the sample stated that they do not use renewable energy in their homes. While the vast majority of the sample (92 per cent) supported requirements for car manufacturers to produce more energy efficient cars; 58 per cent were opposed to the introduction of a federal tax on gasoline to reduce energy consumption. Interestingly, 64 per cent supported a federal tax on gasoline for the purposes of reducing US dependence on foreign oil. This reveals the reluctance among the public to make 'costly' changes to their personal lifestyle despite an increased recognition of the problem of climate change.

The 2007 *Washington Post* survey reiterated the reluctant attitude to pay for environmental goods, with 79 per cent of the sample opposing higher taxes on electricity to encourage reduced consumption, and 67 per cent opposing higher taxes on gasoline to reduce car use or encourage purchases of more efficient vehicles. The sample tended to marginally prefer tax breaks (44 per cent) to government legislation (42 per cent) to encourage the production of more fuel efficient cars. The sample also tended to favour tax breaks for encouraging the development of energy-efficient appliances and buildings. 62 per cent of the sample favoured the introduction of government legislation to reduce the greenhouse gases that power plants are allowed to emit. 94 per cent of those surveyed said that they would be willing to make personal lifestyle changes to help improve the environment, and interestingly the majority maintained that they have already undertaken measures to reduce energy consumption, recycle, and reduce water use in their homes. The majority of those surveyed also said they would support the introduction of legislation to encourage such behaviour at the local level.

The 2008 Pew survey, indicated broad public support for government legislation that required better auto fuel efficiency standards (90 per cent); increased federal funding to develop alternative energy sources such as wind, solar and hydrogen technology (81 per cent) and mass transit (public transport) including subway, rail and bus systems (72 per cent). The survey indicated that the majority of the public also

opposed increases in fuel taxes that would to encourage fuel conservation and stimulate changes in behaviour such as car pooling.

When asked which level of government should be responsible for setting environmental protection mechanisms, half of the sample surveyed in the 2007 *New York Times* poll responded that it should be the federal government while 40 per cent advocated action at the regional level to state government. Thus there is slight preference towards action to tackle climate change to be taken at the federal level. While supporting federal action to promote renewables, improve public transport, encourage the production of fuel-efficient cars and limit emissions from power plants, the majority of people surveyed are opposed to the introduction of taxes on electricity or gasoline, even though such measures would help to reduce global warming. There is an indication of an increasing willingness among the American public to make lifestyle changes in certain areas; as is evident in the number of people already reducing their energy / water consumption and recycling in their homes, while there is greater reluctance to take on 'costly' measures in other areas, such as reducing personal car use.

The US public has shown a significant dissatisfaction with the way its current leaders are handling the issue of climate change. The 2007 *New York Times* poll indicated that 56 per cent of those polled disapprove of the way that President Bush is handling the environment. This dissatisfaction is mirrored in the *Washington Post* poll in which over half of the sample surveyed trusted the Democrats in Congress to handle issues related to the environment and global warming better than George Bush. 70 per cent of those surveyed also thought the federal government should do more than it is currently doing to reduce global warming, with 49 per cent maintaining that it should do 'much more'.

An analysis of over forty public opinion surveys from 1989 – 2002 by Thomas Brewer (Brewer 2003) revealed that the majority of the US public supports the participation of the US in the Kyoto Protocol and disapproves of the administration's withdrawal from the process in 2001. Similarly Brewer finds that the majority of the public supports mandatory emissions reductions for industry and tough government action to reduce global warming. He also undertakes a very interesting comparison of US public perceptions with the opinions of US leaders based on a survey sponsored by the Chicago Council on Foreign Relations and the German Marshall Fund which indicated that while almost half of the public surveyed considered global warming to be a significant threat to the interests of the US in the next ten years, less than a third of US leaders surveyed felt the same way. This significant gap between perceptions of US leaders and the public is evident in the public's dissatisfaction with the approach of the US administration as outlined above.

The results of the polls analysed indicate that the public generally disagrees with the approach being taken by the current administration. The US public appears to support increased government action to help reduce global warming, encourages its participation in the Kyoto Protocol process, and is in favour of mandatory domestic emissions reductions. There appears to be a significant divergence in opinion between the general public and its perceptions of the risk of global warming and the perceptions of current US leaders. The 2007 *New York Times* survey indicates that 35 per cent of those polled said they would not vote for a candidate that did not share

their views on the environment. It will be interesting to see whether or not this increased concern with environmental issues will be reflected in the results of the upcoming presidential elections.

#### 4 CONCLUSIONS

Comparing the public perceptions of environmental issues and climate change on either side of the Atlantic is tempting but nevertheless fraught with difficulties. As briefly discussed above, not only do the survey approaches, articulation of questions and time frames vary between studies, but there are significant differences in geographical scope. Although perceptions are no doubt not uniform across the States in the US, studies discussed in this paper mainly refer to the US population as a whole. In contrast, only *Eurobarometer* studies conducted on behalf of the European Commission have so far given a picture of public perceptions across all EU Member States. Indeed from these studies it is clear that public opinion and understanding of environmental issues varies significantly between different EU Member States. Many of the other studies conducted in the EU in fact focus on only one Member State and much of the academic findings described in this paper focus on the UK alone. It is therefore difficult, though not impossible, to make generalisations on an EU public position with which to contrast to that of the US. However, there are a few obvious points of comparison which do appear from the surveys discussed in this paper.

Considering the difference in the governmental responses in the EU and the US, there are more apparent similarities between the public perception of environmental issues and climate change than might be expected. First, it is apparent that there has been a recent increase in concern about climate change in both the EU and US and in both jurisdictions climate change is considered the most important environmental concern, with pollution as the next most significant issue. There was also in general support for renewable energies and mixed attitudes towards nuclear power. Interestingly, there is also an apparent discrepancy in both the US and EU between the high importance placed on environmental protection, including the apparent willingness to pay for this choice at a policy level, and individual behaviour. Few of the surveyed citizens in either the US or EU had backed up their positive attitude towards the environment with recent environmentally friendly purchases or choices in their everyday lives such as cutting down on their car use or the use renewable energies in their own homes. Furthermore, there remains a limited understanding of the underlying causes of climate change and the technologies available to address it among both the EU and US public. This lack of understanding could limit the policy options available to decision-makers and may become a barrier to implementing appropriate solutions that address the issue.

There are, of course, also differences between the common public perceptions in the US and EU. In particular, there appears to be a significant degree of scepticism of the science of climate change in the US with 57 per cent of respondents in one survey believing that there was still a lot of disagreement among scientists on the issue of whether or not global warming is happening. While, there is no directly comparable question in the EU surveys with which to compare this result, it is hard to believe that, in some Member States at least, a similar degree of scepticism would have been found in the last few years. It is also apparent that energy security may be more important in

the US than in the EU and this is given greater priority than environmental protection by a significant number of Americans. This attitude is also reflected in the high degree of support that is still found in the US for electricity generated by coal fired power stations.

In terms of public perceptions of environmental policy, there appears to be a high degree of support for action to protect the environment and to tackle climate change at the State and Regional level in the US and at the EU level in Europe. This is particularly interesting since, as stated in the introduction, the governmental approaches to climate change have been so different. The reasons for this disjuncture between apparent public support and governmental policy in the US are most probably multiple and complex and cannot be discussed within the context of this paper. However, they may relate to the relative importance of other policy areas - such as terrorism, or the traditionally relatively low levels of government intervention, as well as a reliance on energy intensive lifestyle patterns and infrastructure issues. However, the recent emphasis given to environmental issues in the ongoing selection of presidential candidates may well indicate a greater alignment between public perceptions and governmental action in the US in the near future.

In the EU in contrast, it is conceivable that action on climate change at an EU level may even be ahead and indeed leading public opinion on the issue. The recent publicity of the (carefully worded) *Eurobarometer* survey showing public support for action on climate change may have served as a way of legitimising not just EU action in this area but also potentially the EU project as a whole. As McGowan and Sauter (2005, p28) warn us:

*it is not unreasonable to assume that many of these polls are commissioned as much to shape the public agenda as they are to gather information on public attitude. Most of the organisations involved in polling have specific causes or interests which they are seeking to promote or defend.*

With this warning in mind, it is interesting to note that the Commission claimed that the findings of the survey lend support to the expanding EU environmental *acquis* in general, as well as to recent proposals to tackle climate change in particular. This apparent widespread support for tackling environmental issues at an EU level has important implications not only for environmental policy making but also for the 'EU Project' as a whole. Tackling issues which are important to EU citizens such as environmental issues and climate change, clearly illustrates the EU 'added value' and could help to boost the EU's ratings with European public.

## BIBLIOGRAPHY

Brewer, T.L., (2003), 'U.S. Public Opinion on Climate Change Issues: Evidence for 1989 – 2002', 18 June 2003, Paper prepared for conferences on climate change issues at the Georgetown University McDonough School of Business in Washington DC in 2002 and 2003

CEC (2003) Energy: Issues, options and technologies. Eurobarometer Special Report 169, Wave 57. European Commission. Brussels.

Commissions of the European Communities (CEC) (2008) Attitudes of European Citizens Towards the Environment. Eurobarometer Special Report 295 Wave 68. TNS Opinion and Social. European Commission. Brussels.

Embassy of France in the US (2001) Nuclear Notes from France: Summer 2001. <http://www.ambafrance-us.org/intheus/nuclear/n2f2/summer2001.asp> 15/04/08

Gallup, 2008, Gallup Poll – Environment, 6-9 March 2008, <http://www.gallup.com/poll/105715/Half-Public-Favors-Environment-Over-Growth.aspx>

ICF International (2007) Analysis and Interpretation of Responses from the Carbon Capture and Storage Internet Consultation. European Commission. Brussels.

Ipsos MORI (2007) The Role of Public Perception in Creating a Nuclear Future. Presentation by Robert Knight. June 2007.

Lorenzoni, I., and Pidgeon, N. (2006) Public Views on Climate Change: European and USA Perspectives. *Climate Change* 77, 73-95.

Lowe, T, Brown, K., Dessai, S. de Franca Doria, M., Haynes, K, and Vincent, K. (2005) Does Tomorrow Ever Come? Disaster Narrative and Public Perceptions of Climate Change. Tyndall Centre for Climate Change Research. Working Paper 72.

McGowan, F., and Sauter, R. (2005) Public Opinion on Energy Research: A Desk Study for Research Councils. Sussex Energy Group, SPRU.

MIT LFEE, 2007, 'A Survey of Public Attitudes towards Climate Change and Climate Change Mitigation Technologies in the United States: Analyses of 2006 Results' April 2007, Massachusetts Institute of Technology, Laboratory for Energy and the Environment, MA

New York Times, (2007), New York Times / CBS News POLL, April 20-27 2007, [http://graphics8.nytimes.com/packages/pdf/national/20070424\\_poll.pdf](http://graphics8.nytimes.com/packages/pdf/national/20070424_poll.pdf)

Pew Research Centre, 2008, 'Public Sends Mixed Signals on Energy Policy: Ethanol Research Loses Ground, Continued Division on ANWR', The Pew Research Centre for the People and the Press, Thursday, March 6, 2008, <http://people-press.org/reports/display.php3?ReportID=400>

Poortinga, W., Pidgeon, N. and Lorenzoni, I. (2006) Public Perceptions of Nuclear Power, Climate Change and Energy Options in Britain: Summary Findings of a Survey Conducted during October and November 2005. Understanding Risk Working Paper 06-02. Centre for Environmental Risk, UEA.

Thornely, P. and Prins, W. (2008) Public Perceptions and Bioenergy: Some remarks in preparation of the workshop scheduled for the Thermalnet meeting in Vicenza, October 2008,  
<http://www.thermalnet.co.uk/docs/Barriers%20Precisfinal.pdf> Accessed 08/04/08.

TNS Plc (2003), Attitudes and Knowledge of Renewable Energy amongst the General Public, Report of Findings prepared for Central Office of Information on behalf of Department of Trade and Industry, Scottish Executive, National Assembly for Wales, Department of Enterprise, Trade and Investment, JN9419 and JN9385. Taylor Nelson.

Reiner, D.,M., Curry, T.E., De Figueiredo, A., Herzog, J., Ansolabehere, S.D., Itaoka, K., Hohnsson, F., and Odenberfer, M., (2006), 'American Exceptionalism? Similarities and Differences in National Attitudes Toward Energy Policy and Global Warming', *Environment Science and Technology*, 40(7), 2093-2098

Shackley, S., McLachlan, C. and Gough, C. (2004) The Public Perceptions of Carbon Capture and Storage. Tyndall Centre for Climate Change Research. Working Paper 44.

Washington Post, (2007), Washington Post – ABC News – Stanford University Poll: Environment Trends, Friday April 20, 2007,  
[http://www.washingtonpost.com/wpsrv/nation/polls/postpoll\\_environment\\_042007.html](http://www.washingtonpost.com/wpsrv/nation/polls/postpoll_environment_042007.html)