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Climate Policy and Interest Groups – a Public Choice Analysis

Climate policy is particularly prone to the activities of interest groups. How have these shaped the development of policy targets and instruments?

Climate policy is a recent issue that has become increasingly relevant. Economists often note that its instruments have not been designed using the results of economic theory. Inefficient instruments such as subsidies or voluntary agreements are used instead of trade in emissions or taxes. On the one hand a single instrument is often directed towards the achievement of several targets – such as emission reduction and the raising of employment – and on the other hand a panoply of measures is directed towards the single target of reducing emissions. The degree of international cooperation is rather low despite huge potential cost savings. The theory of interest groups or Public Choice¹ can be helpful in explaining these discrepancies. It can be used to analyze any policy issue but has only been sparsely applied to environmental policy² and not at all to climate policy despite the many indications of the role of interest groups.³

Climate policy has only been in existence for less than a decade but it is a particularly broad issue that touches every sector of the economy. The mitigation of climate change is a global public good. The impact of political decisions on climate change is only felt after a lag of decades, however. The complexity of the issue leads to high information costs. While the general links between greenhouse gas emissions and global warming are accepted by a broad majority of scientists, the extent and impact of regional climate change remain extremely uncertain. Moreover, the macro- and microeconomic costs and benefits of emission reduction are unknown.

This array of uncertainties allows interest groups to choose divergent positions without being scientifically discredited. Due to the wide-ranging nature of the issue, they can choose from a huge array of instruments.⁴ Compared to other “mature” policy issues the positions of the actors are still evolving. The multi-layered structure – from the local through the regional

and national to the supranational and global level – makes interactions extremely complex. Only the national and international levels will be considered in this article.⁵

National Politicians

National politicians see climate policy as one issue among many others, one which only becomes relevant if it captures voters' attention, which happens especially following meteorological extremes. Due to the high information costs of voters, politicians will try to develop a bundle of highly visible and easily understandable measures that benefit well-organized lobbies while their costs are distributed as broadly as possible, preferably even shifted into the future or abroad.⁶ This visibility explains politicians' preference for the subsidization of photovoltaic power systems in public buildings despite their extremely high cost and their inefficiency in emission reduction: the installation of photovoltaic systems can be nicely marketed and their functioning can be understood by voters without additional need for information. Moreover, they can

¹ See the seminal works of A. Downs: *An economic theory of democracy*, New York, 1957; J. Buchanan, G. Tullock: *The calculus of consent*, Ann Arbor, 1962; M. Olson: *The logic of collective action: Public goods and the theory of groups*, Cambridge 1965; W. Niskanen: *Bureaucracy and representative government*, Chicago 1971.

² See e.g. K. Holzinger: *Umweltpolitische Entscheidungsprozesse in der Europäischen Gemeinschaft am Beispiel der Pkw-Abgase*, Berlin 1994.

³ E.g. M. Zürn: *Die Implementation internationaler Umweltregime und “positive Integration”*, MPIFG Discussion Paper 96/3, Cologne 1996. A somewhat similar approach – the theory of advocacy coalitions – from political science has recently been applied to climate policy, see G. Sewell: *Advocacy coalitions and the implementation of the Framework Convention on Climate Change – a preliminary assessment*, in: P. Sabatier (ed.): *An advocacy coalition leans on environmental policy*, Albany 1998. The main difference to Public Choice is that only two interest groups – the “Precautionary Coalition” and the “Economic Growth Coalition” are discussed. Nevertheless, the results tend in the same direction.

⁴ In 1996 the UN climate secretariat listed almost 1000 instruments and measures of climate policy.

⁵ For the EU level see A. Michaelowa: *Impact of interest groups on EU climate policy*, in: *European Environment*, Vol. 8, No. 5, 1998, p. 152-160.

⁶ Germany's climate policy encompasses over 140 measures!

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make use of numerical symbolism such as in the 100,000 solar roofs programme put forward by the new German government. In contrast, the abolition of measures that benefit a lobby is very difficult.

Regulations such as efficiency standards can be understood easily. Subsidies are also attractive as they bring immediate benefit while costs are shifted into the future through public debt. Market-oriented instruments are more difficult to understand and have only indirect impacts that often accrue after the politicians' term of office is over. Moreover, lobbies cannot be granted advantages as easily as in the case of regulations. The discretionary power of politicians would also be reduced.

Instruments that shift costs abroad are very attractive. In many countries petrol is taxed more heavily than other fuels and thus the oil-exporting countries' fears are justified that the costs of climate policy will fall on them. Another classical shifting strategy is to make the adoption of instruments contingent on the adoption of the same instruments by competitors – such as the EU Commission's decision to introduce the carbon tax only if the USA and Japan did likewise, or the 1997 USA senate resolution stating that legally binding targets will only be ratified if developing countries also take up commitments.

If an emissions tax is nevertheless implemented unilaterally, its costs are usually widely spread: due to massive lobbying, industry is exempt and the tax falls on households only. This is the case in the Netherlands, Norway and to a lesser extent in Denmark and Sweden. The energy tax proposal of the new German government also has this feature. The visibility of the tax for the households is low, and resistance is low.

Generally, politicians like to label measures as climate policy that are primarily due to other considerations – such as hikes in fuel taxes or reductions in subsidies. All the relevant reductions in greenhouse gas emissions that have taken place so far have been due to such factors, e.g. the British coal to gas conversion. Sometimes the link is not easy to see – e.g. the strengthening of the German emission target at the Berlin Conference in 1995 was linked to the (successful) bid by Bonn to host the UN climate

secretariat and thus was part of the drive to give Bonn compensation for the move of the capital to Berlin.

Another favourite is to label business-as-usual as a policy measure, e.g. in the case of many “voluntary agreements”. Politicians of any ideological flavour – ranging from the British Conservatives to the German Greens – like voluntary agreements as they show voters that the politician has been very active while interest groups are not hurt.

Generally, politicians like to operate on the international level and to set basic, easily understandable policy targets that lie in the far future far beyond their term.⁷ The former German chancellor Kohl can be seen as the prototype of that course of action: he always stressed the German 25% reduction target for 2005 but never set a target for 2000 despite the latter's being the target year of the climate convention. Possibly he saw a chance of staying at the helm until the latter date...

Political systems without party lists lead to a stronger orientation of MPs towards the interests of their constituency in order to maximize their chance of re-election. Short-term employment issues play a greater role. The macroeconomic benefits of climate policy tend to be difficult to discern at the constituency level. This could at least partly explain the generally sceptical attitude of US representatives towards climate policy. Moreover, the MP will have higher opportunity costs of information and be inclined to take information from lobbies at face value.

Voters

Voters are mainly interested in the supply of private goods such as jobs. They become interested in climate policy if urgent local environmental problems have been solved and the general economic situation is good. Several indicators show that the marginal utility of climate policy is correlated to income.⁸ Due to risk aversion, voters will lobby against events with high costs and a low probability, such as a run-away warming, and thus be more interested in climate policy than expected costs would suggest.

Information costs negatively correlated to income lead to the average voter's mixing up the stratospheric ozone issue and climate change. Thus lobbies can easily influence voters through campaigns – emitters' lobbies will stress the high costs of climate policy and possible loss of employment while environmental NGOs stress the danger of a climate catastrophe. The US emitters' lobby “Global Climate Coalition” spent 13 million US-\$ for ads against the

⁷ This may also be due to the wish to fix the basic contents of a policy.

⁸ See the 24 country poll by R. Duniap and A. Mertig: *Weltweites Umweltbewußtsein*, in: A. Diekmann, C. Jaeger (eds.): *Umweltsoziologie, Sonderheft der Kölner Zeitschrift für Soziologie und Sozialpsychologie*, Cologne 1996, pp. 194-218; and the correlation of Green Party results with income in: Jens Horbach: *Neue Politische Ökonomie und Umweltpolitik*, Frankfurt 1992, p. 158.

Kyoto Protocol suggesting that it would jeopardize 1.5 million jobs.⁹ An opinion survey in the USA¹⁰ tried to measure the effects of this campaign and the intense newspaper debate at the time. It concluded that the debate led to a higher exposure of the American public, at a time when 44% of the respondents had still not perceived any story on the climate change issue. The media campaign succeeded inasmuch as the percentage of respondents stating that scientists disagreed on the climate change issue doubled from 38% to 67%. This did not influence the views of those familiar with the subject. Only those with little knowledge changed their opinion but the effects cancelled out as Democrat supporters became more favourable towards climate policy while Republican supporters became less favourable. Overall, about three quarters of the respondents thought that temperatures had risen during the last century and would continue rising in the absence of climate policy.

To convince people of the existence of global warming, Greenpeace lists every meteorological extreme as an indicator of ongoing drastic climate change.¹¹ This Greenpeace strategy is often successful as meteorological extremes often led to an intense debate on climate change among the general public, e.g. after the 1988 drought and the 1993 flooding in the USA, or the 1990 winter storms and the 1993 and 1995 flooding in Europe. The latest example is the huge attention paid to the 1997/98 El Niño. Nevertheless, interest subsides quickly after normality has returned.

Information costs also lead to voters's preference for regulation as it is easily understood while related efficiency losses can only be explained at high cost. If market-oriented instruments have been successfully implemented in other areas, their application to climate change issues can be understood more easily and voters' attitudes are more positive. This particularly applies to the USA and the UK.

Lobbies play a major role in climate policy because its complexity and broadness mean that politicians, bureaucrats and voters are in need of information that they cannot collect on their own without prohibitive

cost. Industrial lobbies make up two opposed groups: those losing from climate policy and those gaining from it. We shall refer to them as the emitters' and the abatement lobbies.

Emitters' Lobbies and Trade Unions

Lobbies representing emitters' interests will try to keep the costs of climate policy as low as possible or even to gain additional rents. Thus they will favour subsidies and grandfathered permits while lobbying against taxes or auctioned permits.¹² If one of the latter instruments is politically favoured, lobbies will try to stress its disadvantages and the advantages of another instrument – e.g. in the heyday of taxes, permit systems are stylized to be the optimal solution (see the current debate in Norway). Regulation is tolerated as long as it is “controlled” by the technological know-how of emitters.

If subsidies cannot be achieved by lobbying, the favourite instrument is “voluntary agreements” that allow the autonomous rise in energy efficiency due to cost-saving innovation to be labelled as climate-policy-induced activity. For example German industry agreed to a reduction of specific¹³ CO₂ emissions of 20% by 2005. This is a much lower rise in energy efficiency than in the last two decades; in the case of the chemical industry the latter value was almost five times as high! Most sectors can achieve their target simply by the replacement of outdated factories in East Germany. Even more favoured are agreements such as the Australian, British and US ones that set no targets at all but merely involve disclosure of information on energy saving activities. Usually these agreements have nice names (“greenhouse challenge” in the Australian case or “climate challenge” in the USA) but do not deliver. In the British case over 2000 companies signed the “making a corporate commitment” campaign but only 63% of the signatories published anything on their energy savings.¹⁴

Lobbies heavily use the internet to spread their views. Every US emitters' lobby has its own website.¹⁵ Many of them try to obfuscate their character through the choice of a misleading name (e.g. the above-

⁹ See M. Toman, M. Tebo, M. Pitcher: A summary of US positions on climate change policy, Washington 1997, p. 10.

¹⁰ J. Kroznick and P. Visser; The impact of the fall 1997 debate about global warming on American public opinion, Washington 1998.

¹¹ See Greenpeace International: The climate time bomb, Signs of climate change from the Greenpeace database, Amsterdam, updated regularly.

¹² See e.g. European Round Table of Industrialists: The climate change debate: Seven principles for practical policies, Brussels 1994.

¹³ That means that only the per unit emissions are reduced: if overall production rises, absolute emissions reductions are much less or emissions even rise.

¹⁴ Anonymous: Energy efficiency slips down boardroom agenda, in: ENDS Report 274, pp. 7-8.

¹⁵ For links see The Corporate Planet: The weather gods – how industry blocks progress at Kyoto climate summit, 1997, URL: <http://www.corporateplanet.org>. For a typical site see American Petroleum Institute (URL: <http://www.api.org/globalclimate>).

mentioned Global Climate Coalition) or the creation of research institutes. Besides their own researchers, they fund external research such as the famous climate "sceptics" in the USA.¹⁶ For emitters' lobbies it is quite easy to find that the costs of climate policy are high by using accepted economic models and pessimist assumptions about price elasticities or autonomous energy efficiency improvement. To bring their message to the voters, these lobbies use sophisticated campaigning methods such as ads, letters or even e-mail campaigns.

After Kyoto the American Petroleum Institute planned to launch a multi-year, \$5.9 million strategic campaign¹⁷ to convince the American public that climate change is scientifically unproven and thus climate policy is unnecessary. The campaign included an advertising blitz before the Conference of the Parties in Buenos Aires, the establishment of a "Global Climate Science Data Center" staffed by the member companies and the "recruiting" of five scientists that are not yet known as sceptics. All media were to be covered. A special focus was to be set on schools.

Emitters' lobbies often stress potential job losses through unilateral implementation of climate policy measures and threaten relocation.¹⁸ Actual relocation activities are not linked to any extent to climate policy measures, though.

Trade unions in highly energy-intensive sectors have often joined emitters' lobbies.¹⁹ The United Mine Workers of America pressed for coal interests at the climate negotiations and Congress hearings. Even the umbrella union AFL-CIO fears losses of high-

qualification jobs.²⁰ In Germany, the Union for Mining and the Chemical and Energy Industries strongly lobbied against the plans of the new German government to introduce energy taxes even when energy-intensive industry is exempt.²¹ In some instances, emitters' lobbies have even managed to enlist the support of consumers and agricultural associations by stressing short-term impacts such as price rises for goods and inputs (see Table 1).

As these lobbies have long established their organizational structure and contacts, they have a big advantage compared to environmental NGOs and abatement business lobbies which have to incur costs to build these structures.

Abatement Lobbies

Greenhouse gas emission abatement needs technological know-how. Due to the oil shocks, energy savings and renewable energy businesses have sprung up which see a major chance in climate policy to regain market shares lost after the oil price plunge of the late 1980s. They have set up lobby groups which are still rather small but have had notable success, especially if they already represent considerable employment. For example, the German Electricity Feed-In Law subsidizing renewable electricity was retained in 1997 after a big effort by the German Wind Energy Association which argued that the abolition of the subsidy would lead to job losses of several thousand located in structurally weak regions. They joined forces with trade unions and the agricultural lobby and managed to get 4000 people to Bonn for a protest march.

Table 1
Signatories of a Full-page Ad against the Kyoto Protocol in the Washington Post¹

Lobbies	% (Number)
Business umbrella organizations	1.2 (17)
Industrial companies and associations	18.1 (241)
Energy producers and distributors ²	24.4 (325)
Agricultural organizations	11.7 (155)
Service sector companies and associations	11.8 (158)
Chambers of Commerce	2.2 (29)
Construction companies and associations	3.7 (49)
Mining companies and associations	5.3 (71)
Forestry companies and associations	2.1 (28)
Trade unions	2.9 (38)
Consumers associations	10.9 (145)
Others	5.6 (74)
Total	100 (1330)

¹ The list of signatories took two full pages!

² These encompass many small rural utility cooperatives.

Source: Washington Post, 6. 10. 1997.

¹⁶ E.g. the free biweekly newsletter "World Climate News", which has been edited by Patrick McMichaels of the University of North Carolina since 1995, reunites all the famous "sceptics" and is financed by the Western Fuels association, a coal lobby. A more elegant way of influencing the debate was chosen by Exxon, which funded the development of an economic model by the Australian Bureau of Agricultural Research and Economics showing exaggerated costs of greenhouse gas reduction.

¹⁷ See leaked memo cited in Greenpeace International: The oil industry and climate change, Amsterdam 1998, p. 62ff. The overall target is to ensure that "climate change becomes a non-issue, meaning that the Kyoto Protocol is defeated and there are no further initiatives to thwart the threat of climate change", op.cit., p. 63.

¹⁸ "We are concerned that the policy to implement the Kyoto Protocol will put U.S. industry at a disadvantage to compete globally and risk the jobs of millions of American workers", American Automobile Manufacturers Association: America's car companies react to outcome of Kyoto climate change negotiations, Washington 1997.

¹⁹ Umbrella unions, especially in Europe, are proponents of an active climate policy.

²⁰ See AFL-CIO Executive Council: Statement on UN Climate Change Negotiations, Washington, February 20, 1997.

²¹ See Anonymous: Schmoltdt: Die Ökosteuer gefährdet Arbeitsplätze, in: Handelsblatt, 23. 10. 1998.

The reinsurance sector has been lobbying strongly for climate policy since 1995 and even coordinated lobbying with environmental NGOs. This is the first sector which can really offer a counterweight to the emitters' lobbies. It is likely that they will be joined by other service associations as the service sector has a low emissions intensity and will profit from climate policy. This has already started in Germany when five unions covering the service sector lobbied for higher energy taxes after the new government had unveiled its plans for an energy tax.²²

A sector which is in decline but sees a chance to revert to growth due to climate policy is the nuclear industry. So far its lobbying has not been very successful due to high resistance from voters and politicians. After the Kyoto conference, it has stepped up its lobbying, hoping that legally binding targets will strengthen its case.

A recent and potentially very significant development is the move of large European oil companies such as BP, Shell and Elf towards the renewables sector which shows that they are "hedging" against strong climate policy. This means that they are no longer fully committed to the emitters' lobbies – and they have actually left the hardline lobby organizations such as the Global Climate Coalition and even joined renewables associations.²³ BP and Shell declared a 10% absolute emission reduction target by 2010 in 1998 and BP has already introduced an intra-company emissions trading system. Elf even declared a target of 15%. If this tendency continues, the balance between emitters' and abatement interests will change considerably. So far American oil companies have remained very critical towards any type of climate policy²⁴ but even these are starting to hedge by carefully looking into the possibilities of emissions trading, joint implementation (JI) and clean development mechanisms (CDM). Chevron, for example, financially sponsored a 1998 CDM workshop in Africa and sent a large delegation.

Environmental NGOs

There are no environmental NGOs focusing only on climate policy – generally climate policy is one of many issues covered. The NGOs thus set up associations (the Climate Action Networks) on the

national and international level to bundle their sparse capacity. As they can only raise their donation income through easily understandable campaigns, they focus on simple targets or single issues – such as photovoltaics campaigns or the Greenpeace fight against the exploration of new oil deposits. The latter campaign is becoming increasingly difficult as oil companies are starting to join the abatement industry.²⁵

In the first phase of climate policy, focus on targets was very successful as emitters' lobbies were not yet organized and the NGO targets became the base for national targets – such as the famous 1988 "Toronto" target of 20% emission reduction by 2005. The German, Austrian and Danish targets all derived from the Toronto target and have only been superseded in 1998 by the intra-EU burden-sharing allocation.

The efficiency of climate policy instruments plays a minor role as it is difficult to explain. Therefore, European NGOs have been against Joint Implementation²⁶ and emissions trading from the outset. In the US context, where donors are more aware of the efficiency implications due to the success of SO₂ trading, the biggest and most powerful NGOs favour those instruments.

NGOs often have strong links to researchers that have an interest in active climate policy to get more research funding. This is illustrated by the growing circulation of resolutions to be signed by researchers.²⁷

Bureaucrats

Bureaucrats favour instruments that allow discretionary decisions, are subject to negotiation and are based on special information needs. This allows them to raise budgets and play a pivotal role in implementation. Market-oriented instruments do not fulfil these criteria. Thus if they cannot be avoided they will be burdened by special rules such as the exemption of energy-intensive companies from the Danish carbon tax while they have to implement energy-savings plans that have to be approved by the bureaucracy. In Germany the definition of energy-intensive industry exempt from the tax has been left open giving the bureaucracy an important role in setting the rules.

²² Ibid.

²³ See the detailed report in Greenpeace International, *op.cit.*, p. 41 f.

²⁴ See Greenpeace International, *op.cit.*, pp. 43-49.

²⁵ They also try to make the emitters' lobbies' action publicly transparent. See Greenpeace U.S.: Governments: the puppets of industry?, Washington 1997; and Greenpeace International, *op.cit.*

²⁶ See the history of the debate in A. Michaelowa, S. Greiner: Public choice aspects of Joint Implementation, in: *World Resources Review*, Vol. 8, No. 2, 1996, pp. 231-252.

²⁷ In the USA in 1996 a resolution was signed by 2000 economists and another one in 1997 by over 2400 natural scientists. This strategy has been emulated by the emitters' lobbies who collected 15,000 signatures for a 1998 resolution.

Researchers in state-funded universities and institutes can be seen as part of the bureaucracy. They will argue for an active climate policy that adds to research needs and not dare to take an extreme position as it would endanger their budget. In a research system in which private funds play a prominent role such as in the USA extreme positions are more attractive as they will gain funds from lobbies. Thus more sceptics will exist in the latter type of system. Attitudes on the national level towards the different instruments are summed up in Table 2.

Do No-regret Options Actually Exist?

The impacts of different actors can be well illustrated by the example of the debate on whether emission reduction is always costly or whether profitable emission reduction potential exists. Emitters' lobbies naturally take the former position and commission economic studies to show the costs.²⁸ They use macroeconomic modelling which assumes that the existing economy operates efficiently. On the other hand, environmental NGOs see an extremely high potential for profitable emission reduction.²⁹ They do not consider the manifold non-market barriers to their implementation. Politicians can choose one of the strands...

The business-as-usual scenarios used in the EU tend to show a high profitable potential.³⁰ US bureaucrats tend to be much more cautious. This is due to the more intense participation of climate-sceptic economists in the debate. Especially during congressional hearings the issue of costs was hotly debated.³¹

On the international level the Intergovernmental Panel on Climate Change clearly stated that there are

profitable possibilities for emission reduction. It estimates them at 10-15% of global emissions. Therefore, the international debate on this issue was much less controversial than in the USA.

International Level

On the international level climate policy institutions are still evolving. The UN Framework Convention on Climate Change (UNFCCC) adopted at the 1992 Rio Conference³² entered into force in 1994 and has been ratified by 175 countries. At the 1997 Conference of the Parties in Kyoto the Kyoto Protocol was added, which fixes legally binding targets and climate policy instruments.

Internationally every member state of the UNFCCC can exercise a veto. Nevertheless, interest groups play an important role. Due to the need for ratification the national delegations have to take the national interest groups into account. One would expect a consensus on the basis of the minimalist position. Astonishingly, the results of climate negotiations far exceeded the minimalist position (generally held by the USA and the OPEC) and achieved the stabilization target in Rio, the Berlin Mandate and the Kyoto Protocol.

This is due to the specific structure of the actors, which is much different from that at the national level. Another major actor enters the scene: the lobby of international climate research organized in the Intergovernmental Panel on Climate Change (IPCC). Moreover there is the bureaucracy of international organizations and a small group of internationally active politicians. Voters play a negligible role as they do not participate in negotiations and cannot decide on the results as long as there is no referendum on ratification.

The IPCC

Internationally active researchers are a distinct interest group as they already created an aston-

Table 2
Lobby Positions towards Different Instruments of Climate Policy

	Regu- lation	Emissions trading	Emission taxes	Sub- sidies	Voluntary agree- ments
Politicians	+	-	-	+ (↓)	+
Voters	+	-	-	+ (↓)	+
Emitters	+	+	-	+	+
Abatement lobby	+	+	+	+	-
Environmental NGOs	+	- (↑)	+	+	-
Bureaucrats	+	-	-	+	+
Potential for implementation	high	low (rising)	low	high (falling)	high

+ : positive attitude, - : negative attitude, ↑ : becoming more positive, ↓ : becoming more negative.

²⁸ See e.g. P. Bernstein and D. Montgomery: How much could Kyoto really cost? A reconstruction and reconciliation of administration estimates, Washington 1998.

²⁹ See e.g. Union of Concerned Scientists and Tellus Institute: A small price to pay, Cambridge 1998.

³⁰ C. Böhringer, J. Jensen and T. Rutherford: The costs of carbon abatement in six EU countries: implications of alternative baseline energy projections, 1997, URL: <http://www.gams.com/projects/dk/mobidk.htm>.

³¹ See the repeated testimonies of Janet Yellen, chair of the Council of Economic Advisers before congressional committees.

³² For a good overview of the negotiating process up to Rio see I. Mintzer, A. Leonard (eds.): Negotiating climate change, Cambridge 1994.

ishingly efficient organization in 1988 in the form of the IPCC. It was first seen as a consultant to the international bureaucracy but soon developed a strong dynamic of its own. The IPCC regularly reports on the state of climate research through the so-called "Assessment Reports". It consists of working groups that commission researchers to write overview papers on their research focus. These papers have to be based on the review of peer-reviewed publications only and are themselves reviewed by hundreds of researchers all over the world and are sent out for a second review to government representatives after the comments have been incorporated. The government representatives then meet in a closing plenary and negotiate the policymakers' summary³³ line by line. Thus it becomes much more politically influenced than the Assessment Report itself.

Assessment Reports were published in 1990 and 1996³⁴ and the next one is planned for 2001. They define the base for climate negotiations. During the Conferences of Parties the IPCC always advocated a strong climate policy.³⁵ Opinions that deviate from the IPCC consensus find it much more difficult to find followers in the international negotiations than on the national level. Emitters' lobbies therefore try to discredit the IPCC wherever possible through claims of manipulation. The controversy on the creation of the central IPCC statement, "The balance of evidence suggests a discernible human influence on global climate" became famous. Emitters claimed that it had been clandestinely inserted after the Second Assessment Report had been finished³⁶ while it is clear that the IPCC plenary explicitly took a decision on this statement.

National Politicians

International negotiations are very different from national politics. At first, the national position derived from the interactions of the interest groups described above hardens. Politicians try to develop an emis-

sions baseline that is as pessimist as possible.³⁷ It is suggested to national lobbies by the ministerial speech in the conference plenary that their interests have been taken into account. At the same time, a wide-ranging log-rolling process has started. Only a few selected "Friends of the Chair" represent groups of countries and negotiate the actual wording of the decisions. At that stage, the input of national delegations is very limited. Often final negotiations need all-night rounds and even then can only be completed after the original deadline has passed. Here, a determined national delegation can use its veto power to get concessions, as the case of the Russian and Australian targets at Kyoto shows.³⁸

Due to the high media interest in the Conferences of the Parties³⁹ their failure could lead to a loss in popularity for the participating politicians, as voters both with and without climate policy preference back home expect a result: the former a high reduction target, the latter measures which benefit domestic industry. Therefore, on the last day of the negotiations a compromise was always reached which was acceptable to both sides. It entails acceptance of an emission target or an instrument but links it with special rules. Target dates are far beyond the end of the terms of acting politicians. This was particularly illustrated in Kyoto where a 2005 target was rejected. The discretionary options of national politicians are maintained by the lack of harmonization of domestic instruments. Some examples will illustrate these hypotheses:

At the Rio Conference in 1992 the stabilization target was adopted but not made legally binding. The latter was stressed vis-à-vis emitters' lobbies and obscured from the general public.

At the Berlin Conference in 1995 consensus was reached that the target was not sufficient and that negotiations should be started to set a new target. The decision on "Activities Implemented Jointly" lifted

³³ See Intergovernmental Panel on Climate Change: Climate Change 1995, The IPCC Synthesis, Geneva 1995.

³⁴ The 1996 report has three volumes of together more than 1800 pages: Intergovernmental Panel on Climate Change: Climate Change 1995, The Science of Climate Change (vol. 1) Scientific-Technical Analyses of Impacts, Adaptations, and Mitigation of Climate Change (vol. 2), The Economic and Social Dimensions of Climate Change (vol. 3), Cambridge 1996.

³⁵ S. Boehmer-Christiansen: A winning coalition of advocacy: climate research, bureaucracy and "alternative" fuels, in: Energy Policy, Vol. 25, No. 4, 1997, pp. 439-444 suggests that this is due to the wish to create higher research budgets.

³⁶ See J. Daley: The empire strikes back, URL: <http://www.vision.net.au/~daley/empire.html>, 31. 7. 1997.

³⁷ See E. Jochem, H. Herz, W. Mannsbart: Analyse und Diskussion der jüngsten Energiebedarfsprognosen für die großen Industrienationen im Hinblick auf die Vermeidung von Treibhausgasen, Bonn 1994.

³⁸ See the vivid account of the last dramatic scenes in Kyoto after 30 hours of non-stop negotiations in: Germanwatch: Verhandlungskrimi in Kyoto, Bonn 1998.

³⁹ This does not apply to the intermediate negotiation rounds that rarely lead to tangible results. There is a real danger that public interest in the Conferences of the Parties starts to wane.

the blockade of that instrument but did not allow crediting towards domestic targets.⁴⁰

□ At the Kyoto Conference in 1997 legally binding targets were adopted but wide-ranging flexibility instruments reduced their impacts. Important details of their design remain to be decided.

Another trick by the politicians to satisfy lobbies at least in the short term is the change of terms without changes in substance. The instrument of international emissions offsets with developing countries has used up three terms already: at first it was called "Joint Implementation", then "Activities Implemented Jointly" and now "Clean Development Mechanism".

Interest Groups

The role of business lobbies and environmental NGOs is extremely important as they have free access to the international negotiations (see Table 3).⁴¹ Even the sessions of informal negotiation groups have recently been opened to their participation. So far, both camps have been grouped in one NGO category while their opposing interests are recognized by allowing a representative of each camp to present their views in plenary sessions. Generally, the positions of international lobbies are similar to national ones – in Kyoto the emitters' lobbies argued for voluntary agreements. Emitters' lobbies have always opposed legally binding targets. They try to distribute their views in an easy-to-grasp way. For example, the World Coal Institute issues a series of tiny plastic cards such as "Position on climate change" that are regularly updated.⁴² The Global Climate Coalition issued a little 10-page brochure in the size of a passport at the Berlin Conference.⁴³ Even besides that they generally issue only short, relatively unspecific statements of a few pages.

Table 3
Accreditation of NGOs at the Decisive Conferences of the Parties

(Number of delegates in brackets; second column organisations from the host country)

	COP 1 1995		COP 3 1997	
Environmental NGOs	32 (375)	8 (42)	47 (559)	31 (1255)
Emitters' lobbies	37 (196)	1 (36)	39 (280)	8 (325)
Abatement lobbies	17 (52)	2 (3)	16 (121)	6 (107)
Research institutions	48 (107)	14 (93)	46 (190)	15 (190)
Others (e.g. churches)	11 (75)	3 (9)	11 (39)	9 (211)
Total	135 (805)	28 (183)	159 (1189)	69 (2088)

Source: Participants' lists edited by the UN climate secretariat, own classification.

Emitters act in a relatively hidden way, especially through person-to-person contacts to members of national delegations, and only rarely actively disseminate their views through "side meetings" on special issues. The low weight of emitters' lobbies was shown by the discussion to make accreditation subject to the signing of a declaration which shows that the NGO supports the targets of the climate convention. This was never enacted, though.

Umbrella trade unions have not yet taken a firm position but seem to align with emitters' interests. At Kyoto, they voiced fears that climate policy could lead to huge job losses and asked for developing country targets.⁴⁴

Abatement lobbies have been very active at the international level. Compared to the size of their industry, they are overproportionally represented. They always make a statement in the plenary and are thus on a par with emitters. Almost half of the statements collected under the heading "business" NGOs in Taalab's collection are from abatement lobby groups.⁴⁵ Reinsurers lobbied strongly for binding targets on several occasions.

Environmental NGOs have a clear advantage compared to the national situation. They pool their resources and have good information which is used to put pressure on politicians. Especially the links of NGO members to their country's delegation can be exploited while business lobbies do not have the manpower to cover every delegation. The conference NGO daily "Eco" was instrumental in preventing blocking coalitions and the "fall in line" of progressive delegations. It plays an astonishingly important role by exposing shifts in opinion. The NGO consensus position is very critical of market-oriented instruments as the Anglo-Saxon NGOs favouring them are a small

⁴⁰ See UNFCCC: Report of the Conference of the Parties on its first session, held at Berlin from 28 March to 7 April 1995, Part two: Action taken by the Conference of the Parties at its first session, FCCC/CP/1995/7/Add.1, Geneva 1995.

⁴¹ For an excellent compilation of NGO statements during the Kyoto Conference see A. Taalab: Voices against global warming, Frankfurt 1998.

⁴² To give an idea of the type of argument: "The inclusion of legally binding targets on Annex 1 Parties will affect economic (trade) competitiveness – and contribute to the transfer ("flight") of emissions, investments and jobs to countries where these restrictions or limits do not exist" (World Coal Institute: Climate change and the Kyoto Protocol, London 1998).

⁴³ Global Climate Coalition: Climate change: your passport to the facts, Washington 1995.

⁴⁴ A. Taalab, op.cit., pp. 42-47.

⁴⁵ Ibid., pp. 57-97.

minority. Nevertheless, the latter do not hesitate to disseminate their position widely.⁴⁶

Another important way of influencing the debate is the dissemination of detailed studies on aspects of the negotiations that have either been conducted by the NGOs themselves⁴⁷ or have been commissioned with research institutes.

International Bureaucracy

National environmental and climate change bureaucracies are interested in successful climate negotiations as they guarantee their existence and lead to enhanced competences. International bureaucracies are eager to grasp a share of new institutional activities. For example, the World Bank tries to capture a big share of the funds for abatement in developing countries and joint implementation. It was successful in hosting the Global Environment Facility, which manages the abatement funds and is likely to do the same with the new flexible mechanisms through the Prototype Carbon Fund.⁴⁸ The decision to allow a global trade in emission permits also led to high interest on the part of UNCTAD, UNEP and UNIDO as all these institutions hope to host part of the related institutions.

The positions of interest groups concerning instruments of international climate policy are summarized in Table 4. Generally, the international negotiating

process is on its way from a phase of general target setting to detailed decisions on instruments. With growing discussion of details it is probable that environmental NGOs will lose influence while emitters' lobbies gain. The former do not have the financial and human resources needed to follow all the strands of negotiation and the latter can make better use of their huge resources. The growing international bureaucracy is interested in taking up additional tasks and will provide a countervailing force to the growth of emitters' influence. The reaction of politicians highly depends on the media interest in climate negotiations, which could dwindle – or rise if meteorological extremes increase.

Conclusions

Climate policy will be particularly subject to distortions from the activities of interest groups due to the variety of groups concerned, the global repercussions and the long time-scales involved. Thus public choice theory is suitable for explaining the reality of climate policy. On a national level, emitters' interests are very strong even in countries with high voters' preferences for environmental and climate policy. Therefore, a stringent climate policy will be pursued only in rare cases. Usually, measures that have been enacted for other reasons are declared to be climate policy. Such measures are generally inefficient and do not lead to a real emission reduction.

On the international level, the results of climate negotiations run counter to the expected free-rider behaviour. The structure of the negotiations suits those interest groups that promote climate protection. Thus decisions are taken that surpass a minimal consensus. Nevertheless, these decisions become binding only in the distant future. Their transformation into national policies is very difficult and incomplete due to the different constellation of interests. Emitters' interests manage to reduce action by politicians to mainly symbolic action.

As climate policy is a young field, so far no conflicts between the incompatibility of strong international targets and weak national policies have surfaced. The ratification of the Kyoto Protocol will be the first real test in this respect. The problem will clearly surface when it becomes apparent that a majority of industrial countries has not achieved the stabilization target in 2000. On a national level, the power relations of interest groups are likely to change in a direction that allows a more efficient implementation of climate policy measures in the long term.

Table 4

Position of Lobbies Concerning International Instruments

	Differ- tiated targets	Emissions Trade	Harmoni- sation of measures	CDM/Joint Implemen- tation	Trans- fers
Politicians'	+	+	-	+	-
Emitters' lobbies	+	+	-	+	+
Abatement lobbies	-	+	+	+	-
Environmental NGOs	-	-	+	-	-
Bureaucrats	+	-	-	+	+
Researchers	+	+	-	+	+
Potential for implementation	high	high	low	high	me- dium

¹ Tendency compared to national negotiating position.

⁴⁶ See the papers of the Environmental Defense Fund lobbying hard for emissions trading, e.g. EDF: Cooperative mechanisms under the Kyoto Protocol – the path forward, New York 1998.

⁴⁷ See for example the very well researched Greenpeace briefing papers such as Greenpeace: Kyoto Protocol – key issues, Amsterdam 1997.

⁴⁸ This fund shall invest in abatement projects and will be financed by industrial countries. These receive an emissions credit creditable to their domestic target.