SUSTAINABILITY, NORTH-SOUTH DISTRIBUTION CONFLICTS IN INTERNATIONAL CLIMATE PROTECTION AND STRATEGIES FOR A SOLUTION

bs

Mohssen Massarrat
University of Osnabrück

The issue on which all else hinges in climate protection policy is the reduction of trace gases, the reduction in carbon dioxide (CO_2), which is released when fossil fuels are burned, being particularly important, since CO_2 is 55 per cent responsible for the heating effect on the earth's atmosphere. A reduction in the consumption of fossil energy thus constitutes the principal object of international climate protection policy.

Although climate protection policy has economic and social implications alongside the ecological ones, the scientific and political discussion of CO₂ reduction is occasionally narrowed down to its environmental aspect. The factor clearly being overlooked here is that, due to asymmetrical north-south trading structures, what is good ecological policy for the industrialised countries as regards the consumption of materials and energy entails considerable economic effects for the developing countries dependent on exports of raw materials.

During the post-war years, the economic and political elites of the industrialised countries had eyes only for their own "economic miracle", that is,

economic growth; they were able to buy the consent of the population for a growth policy implemented at the cost of the environment and of other regions and populations. This intensified the asymmetrical, unstable and monostructural character of the trading structures between north and south, or created new ones. The current elites have dedicated themselves to an "ecological miracle", but have a blinkered view which only sees the environment on their own doorstep. As a result, they are repeating the mistakes made by the "economic miracle" elites of the fifties.

The following pages will critically examine the concept of an ecological tax reform, as an instrument of climate protection policy currently at the centre of discussions, from the angle of globally sustainable climate protection and draw out its failings and risks.

Climate Protection Policy and Distributing the Burdens

There is extensive agreement in the current discussion on climate protection that global consumption of fossil energies and the associated emissions of trace gases will need to be drastically reduced if we are to be able to stabilise the concentration of greenhouse gases in the atmosphere and still avert an impending climatic catastrophe.

Energy consumption scenarios meeting this condition are described as "ecologically sustainable". The energy scenario developed by the Stockholm Environment Institute (SEI) is one such sustainable scenario and is used as an example in the following analysis (see fig. 1).

The Consequences of Falling Global Energy Consumption for the Energy-providing States

The SEI's energy scenario, intended to avert climate-induced risks for a large number of countries and several hundred million people, could nevertheless give rise to conflicts in the distribution of burdens between industrialised and developing countries in two respects.

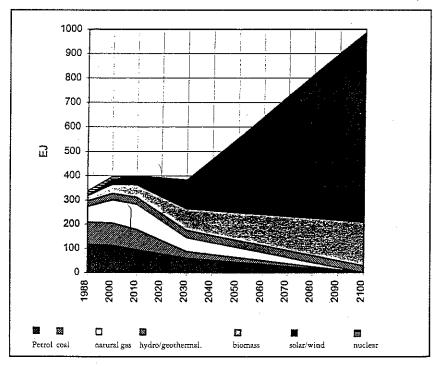
The first area of conflict concerns a just distribution of the permitted consumption of fossil energies and the permitted quantities of CO₂ discharged. Four-fifths of the concentration of CO₂ present in the atmosphere up to now, with its destabilising effect on the climate, has been created by industrialised countries, which have in the meantime achieved a high standard of living, whereas the developing countries, responsible so far for only 20 per cent of the emissions, claim a need to make up considerable ground in respect of their standards of living and consequently a need for increasing levels of energy consumption. This distribution problem on the energy consumption side has already been recognised as a north-south conflict in environmental policy and as

Author's address: Prof. Dr. M. Massarrat, Universität Osnabrück, Fachbereich Sozialwissenschaften, D-49069 Osnabrück, Fed. Rep. of Germany.

a result has been put on the agenda of international negotiations on the climate convention (cf. Loske 1996. 86 ff.; Simonis 1998. 49 ff.).

However, a second area of conflict arises from the fact that the countries of the south, dependent on oil revenues, would have to accept a sizeable drop in income. This problem facing an ecologically sustainable energy scenario on the energy supply side has clearly not yet been recognised, or is not yet identified as a distribution conflict. It must be said, at the same time, that the problems on the energy supply side have not been brought up with any force in the discussions on the climate convention by the supplier countries either, although the attitude of the supplier countries is of central importance to the success or failure of a sustainable climate protection policy. Each of the energy suppliers is acting as if a drastic fall in demand in the field of fossil energy would not affect them, but only their competitors.

The SEI scenario implies that the consumption of fossil energy will be reduced from 274 exajoules (exa = 1018 units) in 1988 to 144 exajoules in 2030 and to



Source: Author's calculations based on the Stockholm Environment Institute's sustainable energy scenario.

Fig. 1 – SEI sustainable energy scenario primary energy mix 1988–2100

zero by 2100. The consumption of crude oil should accordingly fall initially from 116 exajoules in 1988 to 59 exajoules in 2030 and finally to zero in 2100. But what social and economic consequences does a sustainable energy scenario of this sort have for the energy-supplying countries? And what conclusion can we draw for an overall approach to climate protection policy which will be both ecologically and socially sustainable?

To answer these questions, the consequences of three different oil price scenarios on the member states of OPEC (the Organization of Petroleum Exporting Countries), representing all oil-producing countries, are being investigated: Scenario A = US\$ 15 per barrel; Scenario B = US\$ 5 per barrel; Scenario C = US\$ 35 per barrel. For the purposes of the study, it is assumed that OPEC's world market share of 40.9 per cent in 1988 will remain constant throughout the period under investigation (1988–2100), but that energy consumption by OPEC will increase. (The details are taken from an as yet unfinished study by Michael Eisele for the Social Sciences Faculty of the University of Osnabrück forming part of a dissertation project on the subject of "Socio-economic implications for petroleum-exporting countries of CO₂ reduction scenarios for climate protection purposes".) What emerges is that the reduction in the consumption of fossil energies necessary to save the environment would result in a severe fall in income for OPEC in all three scenarios (see fig. 2).

Scenario A (US\$ 15 per barrel) is based on an average oil price and should serve as a "business as usual" scenario not far from reality. However, another conceivable outcome is Scenario B (US\$ 5 per barrel), which could occur in the event of a drastic fall in oil demand and the consequent intensification of ruinous competition among oil suppliers worldwide. In view of the current constellation of the market power consumer and supplier countries, on the other hand, Scenario C (US\$ 35 per barrel) can be more readily excluded.

The three oil income scenarios make it clear that, if an ecologically sustainable energy scenario were implemented, the OPEC countries (whose oil revenues amounted to US\$ 120 bn. in 1994 and US\$ 132 bn. in 1995), along with other oil-producing countries not part of OPEC – e.g. Mexico, Egypt, China, Norway, the UK, Russia, Azerbaijan – would suffer a major loss in income. This is the reason why the oil exporters have opposed any binding obligation to reduce energy consumption in all negotiations on international climate protection so far and why they have made common cause with the USA, which is unwilling to be tied down to a reduction in consumption for domestic political and economic reasons.

The consequences of an ecologically sustainable energy scenario would be very different for individual oil exporters, however. For the period up to 2030, by which date OPEC oil production is to be only half (617 million tonnes) of its value in 1988 (1201 million tonnes), the likely development is as follows. The three low-population countries of Saudi Arabia, Kuwait and the Arab Emirates

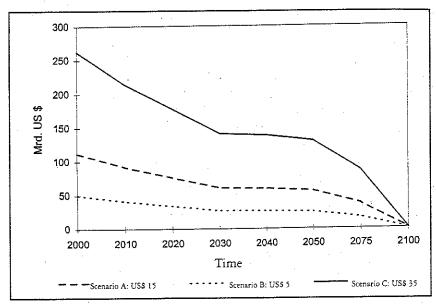


Fig. 2 – OPEC Income Scenarios based on the SEI's ecologically sustainable energy scenario

— with only some 20 million inhabitants between them but accounting for over 40 per cent of oil reserves, which are, moreover, cheap to extract — would probably bear the main burden of falling world oil demand but continue despite considerable losses to amass high incomes. On the other hand, the heavily populated countries of Nigeria, Algeria, Iran, Indonesia, Egypt, Iraq and Mexico — with 480 million inhabitants collectively and limited oil reserves whose exploitation involves higher costs — would probably not survive the steep competition resulting from the fall in demand and no longer continue as oil exporters. In view of the heavy dependence of these countries on foreign-currency income from oil exports, this would result in serious political and social problems: political instabilities, civil wars, wars between states and new waves of refugees would fit with an entirely realistic scenario. However, a development of this type would be inevitable if climate protection policy were to be reduced to its environmental aspect and its far-reaching potentials for economic conflict ignored.

The Dimensions of a Sustainable Climate Protection Policy

In view of the existential interests of most oil-producing countries, it is hardly a sign of a comprehensive awareness of the problem that the implications of this

conflict of interest fail to be taken seriously and OPEC alone is seen as dragging its feet. "For obvious reasons of interests in sales, the oil-exporting countries have adopted an obstructive attitude throughout the negotiating process. . . . They are making full use of their obstructive potential in follow-up negotiations, frequently supported by western oil concerns and cover organisations like the 'Climate Council', which represents the interests of the American petroleum, coal and automobile industries." (Loske 1996. 261)

Even more problematical is an attitude which equates a group of countries with several hundred million inhabitants, who would be the losers of a consistently applied climate protection policy, with the hate-figure of "oil sheikhs", so that their interests are set aside: in a debate with the President of the Association of German Industry, Hans-Olaf Henkel, the Chair of the parliamentary party Bündnis 90 / Die Grünen, Joschka Fischer, declared: "the only people who would suffer [from an energy tax] would be the oil sheikhs and the petroleum dealers" (cf. on this point Massarrat 1995). Just such a thoughtless attitude might also try to discredit the lower-income groups in the industrialised countries, likewise comprising several hundred million souls, by seeing them as the foot-draggers in climate protection policy simply because their justifiable fear of bearing the main burden of the climate protection policy leads them to reject an increase in energy prices.

An approach which ignores the social implications of climate protection policy is alarmingly widespread in the environmental debate and also dominates thinking in the current discussion on sustainable development. By reducing climate protection policy to its ecological core, a reduction in energy consumption, for example, Sebastian Oberthür (1993) follows the theory of spiralling interests in identifying only three interest groups: the party responsible, those affected and accomplices (cf. von Prittwitz 1990). In this light, the OPEC and industrialised countries would belong to the [interest] group of parties responsible because they are causing climatic change through their production and consumption of fossil energies. The island states, along with the countries in the hot regions of Africa, Asia and South America would be assigned to the [interest] group of parties affected because in these countries people's living conditions are deteriorating dramatically as a result of the change in the climate. And finally, the industrialised countries and emerging countries would form part of the accomplices [interest] group because they have the technical and financial capacities available to implement the goal of reduced consumption. In an approach of this nature, those affected by a climate protection policy narrowed down to ecological considerations - lower-income consumers in the industrialised and developing countries and the populations of the oil-producing states, that is, the majority of the world's population - are simply left out of the analysis.

A climate protection policy combining an ecological approach with the social dimension must be in a position to give satisfactory answers to two questions: (1) What maximum quantity of fossil energies is it permissible to produce and consume worldwide over what period? (2) How are the foreseeable economic and social burdens of climate protection distributed worldwide between those responsible and those affected, between winners and losers? A global consensus on both these questions is a basic precondition for the success of a sustainable climate protection policy. What is required for such an agreement to come about is a willingness amongst all those concerned to implement an equalisation of interests (the acceptance principle), the choice of the right national energy policies and environmental instruments, and a readiness to adjust national energy policies to a global climate protection strategy (the globality principle). It is therefore a matter of investigating whether the solutions currently under discussion in the industrialised countries satisfy the criteria for a sustainable climate protection policy outlined here.

The Three Instruments of Climate Protection Policy and the Problem of Energy-dumping Prices

The aim of any environmental protection policy is to reduce the production and consumption of environmental resources to a level that can be borne by the environment. The two instruments by which this goal may be attained are quantity and prices. The preference for one or other of these two regulators forms the central measure differentiating the strategies for a solution supported by social scientists and economists on the one hand and politicians on the other, which are in part diametrically opposed. The discussion at present centres on three principal instruments of climate protection policy: a) an ecological tax reform (price regulation), b) the introduction of licences or certificates (indirect quantity regulation) and c) binding quantity controls (direct quantity regulation).

The price instrument of ecological tax reform has up to now enjoyed the greatest popularity. This approach to reform is favoured by environmental economists including Hans Christoph Binswanger (1991), scientists such as Ernst-Ulrich von Weizsäcker (1992), environmental groups such as Greenpeace, research institutes including the Wuppertal Institute for Climate, Environment and Energy and the German political parties Bündnis 90 / Die Grünen and SPD. While the concept of indirect quantity regulation by means of the introduction of licences is fervently discussed among academics – especially among neoclassical environmental economists (cf. Maier-Rigaud 1994; Kölle 1992; Simonis 1998) – it plays a markedly less significant role in the political debate on climate protection. The third strategy for a solution, based on binding quantity controls, that is, direct quantity regulation on the

supply side (cf. Massarrat 1993; 1994), is still relatively new. Faced with considerable psychological barriers in the political arena, it has at present the least chance of being recognised as a climate protection strategy.

Both the advocates of an "environment tax" and the champions of the licence solution start from the correct assumption that current energy prices are not scarcity prices. They differ, however, in the instrument they consider more suitable for creating the scarcity to serve the cause of climate protection policy, the former favouring the price instrument while the latter support the quantity instrument. Ernst-Ulrich von Weizsäcker, for example, argues for an environment tax, because "energy prices do not tell the ecological truth" (1992. 141f.). Gerhard Maier-Rigaud, however, considers the tax solution to be an ecologically uncertain instrument because it attacks the environmental goal only indirectly; in his opinion, the licence solution is better suited for integrating the scarcity of "climatic stability" into existing markets by means of scarcity prices (1994.43f., 106f.).

The three positions – representing the currents of thought in their respective branches of environmental economics – agree in their systematic disregard of the following questions: Why has it only now become necessary to "discover" scarcity prices for a scarce resource like fossil fuels? Have there ever been scarcity prices for this resource? If not, why not? If yes, why are there none at the present time? Only after these questions have been answered will it be possible to consider the idea of a scarcity strategy oriented on climate protection, because – as will be demonstrated below – it is only by answering these questions that the problem of burden-sharing and the choice of the most effective instruments for a sustainable climate protection policy can be given a broad foundation. Neglecting these questions, on the other hand, obstructs a view of the global situation and brings with it the risk that the discussion will remain stuck in incomplete systems and overlook its conceptual weaknesses.

In the view of the present author, current energy prices are dumping prices, resulting from a structural overproduction of fossil energies on the world market. The grounds for this thesis – which are outlined with the proper thoroughness elsewhere – can only be presented here in summary form, shorn of important differentiations: during the present century, the industrialised countries, in which only one-fifth of the world's population lives, have succeeded in developing not only their own energy resources but also those of the rest of the globe for their own energy needs and consequently in optimising their own potential for exploiting energy resources with the best possible comparative cost advantage. Where, at the start of the century, the industrialised countries merely formed the demand side on the world market, direct colonialist access to the energy resources of the non-industrialised world enabled them to take over the supply function at the same time. This has

systematically excluded an option for the non-industrialised energy-supplying states to maximise their benefit (for a detailed summary, cf. Massarrat 1993).

This structural distortion of the world energy market was possible because for the first half of this century the other four-fifths of the globe were still caught in the slumber of the pre-industrial age and left the exploitation of their exhausrible energies and resources - in some cases voluntarily, in others by submitting to superior force - to the one-fifth of the world's population with the purchasing power. This time difference in the progress of industrialisation supplies the main reason why a scarcity of fossil fuels - already in existence by comparison with the potential demand from the world's entire population - had failed to arise and why the development of economic scarcity prices has failed to come about, or has been successfully prevented. As a result of this artificial overproduction, oil and energy prices overall have settled at a dumping price level well below the scarcity prices (see fig. 3). (For exhaustible resources, the scarcity price is not determined by the average production cost but by the marginal cost - that is, the greatest extraction cost - in the trade or by the substitution cost of the last unit of the resource for which there was still just a demand. For the energy sector, it is the extraction cost of European anthracite coal mines which are highest. Another way of determining the scarcity price would be by reference to the cost of substituting regenerative energies such as wind or solar energy for fossil energies.)

This "dumping price trap" on the demand side, i.e. in the industrialised countries, is still operating more or less faultlessly. The oil supply on the world markets is virtually inelastic, which means that oil and energy prices cannot perform their regulatory function. However, if the current share of consumption taken by the not yet industrialised four-fifths of the population were to rise from its present value of approximately 20 per cent of world consumption to just 30 per cent, with the demand from the industrialised countries remaining constant, the scarcity of fossil fuels would make itself felt in the form of a dramatic rise in energy prices.

Looked at in this way, asking why there are no scarcity prices in the field of fossil energies amounts at one and the same time to enquiring after the historical causes of the climate problem itself. If the scarcity function in the energy field had not been disabled by artificial overproduction consequent on episodes of colonialist intervention, market-determined scarcity prices would have put a halt to wasteful consumption of energy and as a result prevented the climate problem from coming about.

To turn this argument on its head, we find here a pointer to the most effective climate protection strategy: either the supplier countries succeed in enforcing a direct scarcity strategy, or the demand for energy in the developing and emerging countries – e.g. China, India, Indonesia and Brazil – will rise so

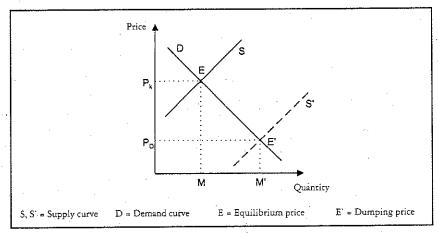


Fig. 3 – Structural overproduction of oil resulting from the quasi-monopolistic power of regulation enjoyed by the demand side

sharply in the near future that the present overproduction of energy will disappear and the dumping prices will be replaced by scarcity prices on a worldwide basis. In such a case, admittedly, any effort at implementing an effective international climate protection policy would be pointless.

The OECD countries, especially the USA, are far from favourably disposed to such a development. Rather, the efforts by the USA and other industrialised countries to gain a toehold in the Caspian Sea, Africa (Congo, Angola), the South China Sea and anywhere else suspected of possessing significant oil reserves would indicate that the industrialised countries would prefer to maintain the existing overproduction of fossil energies and as far as possible obstruct the development of scarcity prices.

Disregarding the causes of the continuing lack of scarcity prices for fossil energies means ignoring the existing distribution conflicts between the rich one-fifth and the poor four-fifths of the world's population. Neglecting the basic conditions under which the world energy market functions in this way makes it impossible to reach a realistic judgement of the ecological effectiveness or any other consequences of instruments of climate protection policy such as environmental tax reform or the licensing solution. The question is not whether these strategies have been logically thought through using models and under "laboratory conditions": the decisive question is rather whether, in the present conditions of overproduction of energy and the dumping prices at which it is sold, a "green" tax or a licensing solution could develop the desired effect at all. A second question which arises is whether the existing distribution conflicts might be defused in the wake of a consensus on a climate protection policy, or

whether, on the contrary, this might not simply fan the flames. In the following section, the instrument of climate protection currently enjoying the greatest popularity, environmental tax reform, will be confronted with these two questions.

Environmental Tax Reform - some Fundamental Objections

Environmental tax reform is a concept covering a number of fields; at its heart, however, is an energy tax. The following critical objections refer primarily to the energy tax and therefore cannot in all cases be applied to other environmental sectors.

An Energy Tax Intensifies the Distribution Conflict and Obstructs a Global Consensus on Climate Protection Policy

In the industrialised countries, energy taxes are nothing new. In the OECD countries, petroleum tax accounts for between 60 and 80 per cent of the final energy price (see Anonymous 1994), without this having brought about any significant reduction of energy consumption in these countries in absolute terms. The source of the petroleum tax is the price difference between the scarcity price and the dumping price (see fig. 3 – for a detailed elaboration of this based on revenue theory see Massarrat 1993.54 ff.).

Since the fifties, the governments of the oil-consuming countries have been drawing sizeable revenues from this rich source of income, which they have put back by construction of highways (Autobahns) and armaments, promoting economic growth, health and education etc. Without lifting a finger the oil consumers, i.e. the industrialised countries, thereby acquire sizeable capital gains which, however, result in a considerable loss of capital on the part of the oil-supplying countries. The redistribution of tax at the cost of the suppliers is part of the basic wisdom of neo-classical economics: "A tax increases the price paid by the consumer and reduces the price received by the producer - the difference is pocketed by the state." (Samuelson 1980) This statement also applies to the world market on which, by means of petroleum taxation, the OECD states have increased their revenues and at the same time created price competition among the international oil suppliers through the resulting fall in demand. The tax on petroleum thus results in a veiled redistribution from the oil/energy-supplier side to the consumer side. In Germany, petroleum tax provided the third largest source of taxation in 1977, raising 66.1 bn deutschmarks. This "solidarity supplement" paid to Germany under compulsion by the oil exporters thus amounted to 2.5 times the intra (west-east) German solidarity supplement of DM 26.8 bn. (on these estimates cf. Neue

Osnabrücker Zeitung, 10.10.1997). The total sum harvested by the OECD countries via oil taxation is now most probably over U\$ 2 billion.

The introduction of environmental taxes on energy and other resources imported from developing countries represented a form of veiled, latent expropriation of these countries by the industrialised countries. The advocates of "green" tax reform will have to ask themselves whether it is their wish that an environmental protection policy of this type should take the place of the current policy of growth promotion in the industrialised countries to the debit of the developing countries. This would, of course, stand in contradiction to the interstate consensus required for sustainable climate protection (the consensus principle).

An Energy Tax Will not Prevent the Rise in Energy Consumption, but Will Merely Make a Shift

If it reduced the consumption of energy at all, the introduction of an environment tax in the industrialised countries would bring about a further drop in prices on the energy markets. This would further intensify the ruinous competition for market shares among the supplier countries, which would result in further increases in production and additional falls in prices and revenues. In their turn, falling world market prices for fossil fuels would stimulate worldwide demand and cause an increase in global CO₂ emissions, so that any saving in the high-price regions resulting from environment taxes would most probably be overcompensated by the increasing consumption of energy in the low-price regions. This means that an environment tax would set in motion processes which would undermine climate protection, since they would bring about reduced emissions only in individual countries or regional associations such as the EU. And this would contradict the globality principle of a sustainable climate protection policy.

Although the effects of internal price movements on external trade are generally known, the global economic effects of an energy/oil tax have been systematically ignored in all studies presented by academic institutions so far, as if Germany or Europe were surrounded by an economic wall (cf. Deutsches Institut für Wirtschaftsforschung (DIW) 1994; Meyer et al., 1997; p. 2 of the latter study draws attention to important methodological defects in the former deriving from simplifying and mistaken assumptions in respect of endogenous states of independence, and is in this respect more thorough and closer to the reality). Although "insular studies" of this sort may refute the argument of opponents of a climate protection policy that it would result in increased unemployment or endanger competitiveness and the location of companies, and may also result in positive headlines such as "Jobs miracle. Economic researchers

promise green tax reform will bring 1.5 million new jobs" (Frankfurter Rundschau, 22.5.1997) and "Green tax reform to create new economic miracle" (Die Tageszeitung, 7.11.1997), the insular character of these studies will not permit any solid statement on the global effect of a environment tax. The serious consequences of a reduction in energy consumption in the industrialised countries for the countries of the South which depend on oil exports are clearly of interest to neither the Social Democratic Party and Bündnis 90 / Die Grünen, which propose to introduce such a tax, nor the vast majority of the non-governmental organisations (NGOs) active in environmental and development policy, who have uncritically adopted the concept of environmental tax reform.

(The Wuppertal-Institut study (1996) confirms on pp. 400f. the existence of this problem inherent in environmental tax reform, to which the present author has repeatedly drawn attention. In spite of this, however, the authors give priority to an internal political consensus on the introduction of an environment tax over the problems created in other regions (p. 402): "Better equality of opportunity for the countries of the South and a sharing of responsibility by the industrialised countries — both of these are open to dispute. But these two aims need not be linked to an environmental tax reform if this endangers its implementation. They can (and therefore should) be linked to it at a later stage, once the environment tax has become established.")

Energy Taxes are Either Ecologically Ineffective or Else they Hamper the Acceptance of Ecological Reform

The energy-saving effect of an environment tax depends on the one hand on the level of the tax rate and on the other on the elasticity of prices on the energy demand side. According to calculations by the Osnabrück study mentioned above, for example, prices for fossil energies in Germany would need to be raised by an average of 14.6 per cent a year to reduce consumption within the old boundaries of West Germany by a mere 2.9 per cent per year and by just 25 per cent over 10 years (cf. Meyer et al., 1997.10). Environmental taxation thus finds itself in an insoluble dilemma: if, for example, the rate of tax is set at 5 per cent per year to increase acceptance of the tax as proposed by the Association to Promote Environmental Tax Reform, the energy-saving effect disappears (cf. Förderverein ökologische Steuerreform 1997, which announces "signals set for a new economic miracle" by means of annual price increases of 5 per cent for petrol, diesel, heating oil, natural gas, coal and electricity and anticipates financing a reduction of the top rate of tax to 40 per cent and a reduction in secondary wage costs and costs of benefits from the revenues obtained, a contribution by this model to energy saving - the actual aim of an environmental tax reform - is not substantiated, but merely expressed as a hope). If, on the other

hand, drastic price increases are applied – e.g. by increasing petrol prices to 5 deutschmarks (£1.70) per litre over 11 years, as proposed by the Bündnis 90 / Die Grünen political party – in order to achieve significant saving effects, acceptance of the tax will fall rapidly, especially among the lower-income groups. In either case, the reduction in consumption called for by climate protection policy would fall by the wayside.

Energy Taxes Offer no Guarantee of a Reduction in Energy Consumption Figures

Although higher rates of tax and a rise in the level of energy prices can bring about a fall in energy intensiveness – given acceptance – they offer no guarantee that energy consumption will fall over the medium or long term in absolute terms. The very fact that the environment tax is a price instrument could result in the undesirable consequence for climate protection policy that the energy saved is compensated out by growth in sales and the related increase in energy consumption. Despite drastic reductions in energy intensiveness, energy consumption has hitherto always increased in line with economic growth.

The price instrument of environmental tax reform is not a reliable means of achieving a sustainable use of resources. The local authorities in Germany's nature reserves have understood this for years: the quantity of leisure use made of the Dümmersee lake near Osnabrück, for example, has been precisely regulated for decades by the imposition of an upper limit to the number of sailing boats allowed. Given the limited capacity of the lake, rights can only be granted to use the available space; there is no possibility of increasing the number of boats. However, if the local authority in question were to replace regulation by quantity with a tax on sailing boats, even extreme rates of tax would most probably fail to protect the Dümmersee from being jammed with boats.

(The well-off are clearly prepared to accept a "planned economy" for the privileged use of ecological niches with limited availability. However, if these same people were presented with a choice, in respect of the consumption of energy, between quantity restrictions and a "green" tax, they would in all probability opt for a tax solution, since this offers the lesser obstacle to "freedom of the road" in powerful cars or to an ongoing rise in economic growth.)

The Market as an "Ecological Disciplinarian"?

Propaganda for an environmental tax reform is based on the illusion that ecological processes can be kept in check by means of economic regulatory instruments. Even Ernst Ulrich von Weizsäcker (1992.145) sees the market as an "excellent ecological disciplinarian". But the conditions under which

ecological systems operate fall ourside the economic sphere and are therefore independent of its regulatory mechanisms. For this reason, targets of environmental policy such as stabilising the climate require from the start a clear ecological framework to work in.

Prices and markets can only provide an efficient instrument for allocation and optimum use within a regulated framework; they can never create the framework itself. At all events, there are no historical examples of this. In the absence of a framework, prices and markets have instead tended to bring about repeated crises and catastrophes, as in the early development phase of capitalism, or major economic crises, such as those occurring in the first half of this century.

The lack of a social framework in early capitalism, combined with a surplus of labour, resulted in longer working hours, the employment of women and children en masse and a further increase in the structural surplus of labour. The decades-long "wage dumping trap" caused by this gave rise to starvation wages, poverty on a huge scale, falling working lifetimes by preventing the regeneration of human labour, and the destruction of social relationships. However, no one in the workers' movements of the nineteenth century took it into his head to suggest putting a halt to this problem by introducing a social tax reform. The correct solution to the social problem of early capitalism was to introduce a statutory standard working day. Clear quantity regulation (e.g. the eight-hour day) created a framework which was not to be exceeded, in order to safeguard the capacity of physical labour to regenerate itself. This political framework also included banning child labour, introducing social security systems, the collective bargaining system etc.

Just like the capacity of social systems to regenerate, the capacity of ecological systems to regenerate must be protected by a political framework, that is, by quantity regulation. Nature has its own need for a "standard working day", and this must be protected if necessary by prohibition. Once this framework has been set up - and only once it has been set up - the economic functions, e.g. the distribution and exploitation of resources, can be left to the market.

The loss of a regulatory function for fossil energy prices resulting from a lack of elasticity on the supply side, prodigal energy consumption and the consequent climatic problem all derive from the absence of a political framework for the utilisation of exhaustible energy resources. For a sustainable climate protection policy, therefore, what is required is that the maximum global consumption of fossil fuels be made binding in international law, with a plan for the reduction of energy and CO2 including quantity regulation laid down according to ecological criteria. This may also call for a production ban within sensitive ecosystems, e.g. in off-shore areas or in regions where the quality of life or the social systems of the indigenous population might be endangered. Only once markets and prices have achieved their economic functions of allocation and optimisation of use within an ecologically and politically defined tramework of this type does it make sense - for the purposes of economic/ecological fine tuning, relating perhaps to the CO2 content of different fuels + to consider the introduction, for example, of a CO2 tax.

(It is difficult to understand how a prominent advocate of environmental protection like Ernst Ulrich von Weizsäcker - 1992. 141 ff. - can reject the creation of a framework through the introduction of quantity controls simply by citing the failure of planned economies and can confidently entrust the solution of global environmental problems such as the climate problem, against all historical experience and theoretical considerations, to the market, "the green disciplinarian", that is, taxes and prices.)

Closing Comments

The analysis above focussed on an energy tax, since it is to this instrument that the greatest hopes in climate policy at present are pinned. However, energy tax is a national pricing instrument whose effectiveness as an element in climate protection policy is questionable. Hardly any attempt has been made to coordinate it with a global climate strategy, and as an isolated measure it will intensify the existing north-south distribution conflict. If the structural overproduction of energy and the "dumping price trap" are allowed to continue, the introduction of an energy tax would amount - as is the case already with the petroleum tax - to expropriating the oil/energy-owning countries and redistributing oil/energy revenues to the benefit of the major energy consumers.

In the present conditions of a structural overproduction in the energy sphere, the licensing solution, which is at any rate a more useful approach than the tax solution, would be likely in practice to cause similar problems to the energy tax. A more detailed critique of the licensing solution and a presentation of the direct quantity shortage approach, which the present author sees as the most effective instrument of a sustainable climate protection policy, is outside the scope of this article. A more substantial publication to cover this is planned.

REFERENCES:

Anonymous (1994): Crude Oil Falls, But Consumer Tax Rises. In: Energy Détente 15, No. 5; p. 5.

BINSWANGER, H. C. (1991): Geld und Natur. Das wirtschaftliche Wachstum

im Spannungsfeld zwischen Ökonomie und Ökologie. Stuttgart.

Deutsches Institut für Wirtschaftsforschung (DIW) (1994): Ökosteuer - Sackgasse oder Königsweg? Wirtschaftliche Auswirkungen einer ökologischen Steuerreform. Gutachten im Auftrag von Greenpeace e.V. Berlin/ Hamburg.

FISCHER, J. (1995): In: Der Spiegel, No. 39.

FÖRDERVEREIN ÖKOLOGISCHE STEUERREFORM (1997): Memorandum. In: Die Tageszeitung, 7.11.1997.

Kölle, C. (1992): Zertifikate in der Energie- und Umweltpolitik. In: Zeitschrift für Energiewirtschaft, No. 4; pp. 293–301.

LOSKE, R. (1996): Klimapolitik im Spannungsfeld von Kurzzeitinteressen und Langzeiterfordernissen. Marburg.

MAIER-RIGAUD, G. (1994): Umweltpoltiik mit Mengen und Märkten. Mar-

MASSARRAT, M. (1993): Endlichkeit der Natur und Überfluss in der Marktökonomie. Marburg.

Massarat, M. (1994): Energiesteuer – Ökologie auf Kosten der Natur. In: Kommune, No. 7; pp. 42–50.

MASSARRAT, M. (1995): Gut gemeint, aber schlecht durchdacht. Ein offener

Brief an Joschka Fischer. In: Schrägstrich; pp. 11-12.

MASSARRAT, M. (1998): Das Dilemma der ökologischen Steuerreform. Plädoyer für eine nachhaltige Klimapolitik durch Mengenregulierung. Marburg.

MEYER, B. et al. (1997): Was kostet eine Reduktion der CO₂-Emissionen? Universität Osnabrück: Institut für Empirische Wirtschaftsforschung, Beitrag Nr. 55.

OBERTHUR, S. (1993): Politik im Treibhaus: Die Entstehung des internationalen Klimaregimes. Berlin.

SAMUELSON, P. A. (1980): Economics. New York.

SIMONIS, U. E. (1998): Klimaprotokoll zu den Verteilungsproblemen der Weltumweltpolitik. In: Simonis, U. E. (ed.): Weltumweltpolitik. Berlin.

STOCKHOLM Environment Institute (1993): Towards a Fossil Free Energy Future. The Next Energy Transition. Boston.

Von Prittwitz, V. (1990): Das Katastrophenparadox. Elemente einer Theorie der Umweltpolitik. Opladen.

VON WEIZSÄCKER, E. U. (1992): Erdpolitik. Darmstadt. 1992

BUND & MISEREOR (ed.) (1996): Zukunftsfähiges Deutschland? Berlin.

Subject Overview

Acknowledgement:

The Institute for Scientific Co-operation has played its part in furthering the exchange of scientific research results between Germany and the countries of Latin America, Africa and Asia for more than 30 years.

As Director General of this institute and on behalf of my colleagues in the chairmanship I would like to express my thanks to all contributors to this series LAW AND STATE, as well as to the others edited by our institute. Many valuable suggestions were made by our readers, pointing out even now how important a published book is, coming into their hands regularly for nearly 30 years, available without prohibitive prices in foreign exchange. The institute appreciates the high rate of exchange literature received for distribution to experts and expert institutions in Germany.

The Ministry of Science, Research, and Art of the State of Baden-Württemberg, which has maintained the basic finances of the Institute since 1968, has decided that the printed book is no longer the means of communication for the 21st century. Internet, e-mail and the modern media will replace the book and allow the free exchange of ideas much more easily than hard copies of printed books. The Minister himself has ordered the Institute for Scientific Co-operation to be closed down at the end of the century, which means this year.

Prof. Dr. Dr. b. c. Jürgen H. Hohnholz Editor in Chief and Director of the Institute for Scientific Co-operation

LAW AND STATE

A BIANNUAL COLLECTION

OF RECENT GERMAN CONTRIBUTIONS TO

THESE FIELDS

FOCUS: DEVELOPMENT OLD ISSUE – NEW PROBLEMS

Edited in Conjunction with Numerous Members of German Universities and Research Institutions by the Institute for Scientific Co-operation

LAW AND STATE Recent German Studies

The aim of the series LAW AND STATE is to keep scholars, administrative officers and relevant institutions in other countries informed on German research studies in the fields of International Law, Political Science and Sociology. To this end particularly important contributions with practical relevance are selected from German-language publications and translated into English, thus facilitating direct access for an international audience to articles originally written in German.

This special volume is dedicated to the problems of development.

In exchange for LAW AND STATE the Institute for Scientific Co-operation would appreciate receiving journals, books and individual articles which can be of interest to German specialists. In this way, a closer exchange of ideas can take place between scholars and institutions in Germany and abroad.

This volume is edited on behalf of the Institute for Scientific Co-operation by Prof. Dr. Jürgen H. Hohnholz, Tübingen in conjunction with Prof. Dr. Stefan Oeter, Hamburg; Prof. Dr. Volker Rittberger, Tübingen and Prof. Dr. Wolfgang Graf Vitzthum, Tübingen.

Desk Editor: Isolde Zeiler, Tübingen.

The editors would like to express their gratitude to Prof. Dr. H. C. F. Mansilla, La Paz, Bolivia, for his illuminating introduction to this focus volume.

INSTITUT FÜR WISSENSCHAFTLICHE ZUSAMMENARBEIT
Olgastr. 8, D-72074 Tübingen
Federal Republic of Germany
© 1999
ISSN 0341-6151

Printed by Druckerei Deile, Tübingen

LAW AND STATE - Volume 59/60 - 1999 Institute for Scientific Co-operation, Tübingen, Federal Republic of Germany

CONTENTS

Development – Old Issue – New Problems by H. C. F. Mansilla
Good Governance and its Obstacles The World Bank: Good Governance and the New Institutional Economics by Christian Theobald
Markets of Violence The Violence Trade and the Goal Rationality of Violence by Georg Elwert
Human Rights and Development The Universal Protection of Human Rights – Reality or Utopia? – by Eckart Klein
International Human Rights Norms, Transnational Networks and Political Change in Developing Countries by Human Rights Research Group
Breakthrough in Rome. The Statute of the International Criminal Court by Hans-Peter Kaul
Environment and Development Repercussions of the Right to Sustainable Development – Help or Hindrance? by Rudolf Streinz
Environmental Degradation as a Cause of Conflict? by Frank Biermann, Gerhard Petschel-Held, Christoph Rohloff
Sustainability, North-South Distribution Conflicts in International Climate Protection and Strategies for a Solution by Mohssen Massarrat 196
Subject Overview
Editorial Nova