

Prof. Dr. Felix Ekardt, LL.M., M.A./ Antonia von Hövel

# **Distributive Justice, Competitiveness, and National/ Global Climate Protection: “One human – one emission right”**

Research Institute for European Environmental Law (FEU)  
Bremen Institute for Transnational Constitutional Law (BITRAV)  
University of Bremen, Universitätsallee GW I, D-28359 Bremen  
Phone 0049-0421-2182136, Fax 0421-2187490  
[fekardt@uni-bremen.de](mailto:fekardt@uni-bremen.de)  
[www.jura.uni-bremen.de/Ekardt.pdf](http://www.jura.uni-bremen.de/Ekardt.pdf)

**Felix Ekardt** (\*1972), lawyer, philosopher, and sociologist, is working as a Professor for Environmental Law at the University of Bremen, Faculty of Law, Germany since 2003. He is visiting lecturer at the University of Leipzig, Faculty of Philosophy, since 2002; author for various national newspapers (Frankfurter Rundschau, Financial Times Deutschland, TAZ, Capital u.a.); political advisor on questions of climate protection for German Federal and Laender ministries and parliaments (e.g. for the Federal Government on questions of long-term climate protection strategies); also member of various advisory commissions. Among his other achievements are some 20 international presentations 2007-2008, including World Congress of Legal and Social Philosophy, World Congress of Sustainability Research, World Congress of Law and Sociology, etc. He was among the five “Young Researchers of the Year” selected by the Deutsche Hochschulverband and the newspaper DIE ZEIT in 2007.

**Antonia von Hövel** (\*1985), lawyer, is a member of the PhD students group of Felix Ekardt and is currently working on questions of a Global Marshall Plan and of global climate protection.

## **Summary/ Conclusions**

*The paper offers a basic structure for a future transnational climate policy beyond the Kyoto Protocol, but also demonstrates the possibilities for a strongly extended pioneering role of the European Union – secured by complementary border adjustments – in the context of the ongoing EU and global climate policy debate, but in contrast to the usually discussed approaches. In addition, the two most-discussed obstacles to an effective climate policy are examined in detail: (national or global) social distributive justice and competitiveness. Moreover, the paper gives a normative justification for the global formula “one human – one emission right”, and outlines possible enforcing instruments for a global and European implementation.*

## **I. Competitiveness and social compatibility – slowing down climate policy?**

National and European climate policies (while discussing the EU commission proposal for a new climate strategy) are increasingly facing a major obstacle: How can climate policy be advanced without detriment to (national or global) social distributive justice *and* how can this “social climate policy” be reconciled with competitiveness on a global free-trade market (especially if European climate politics continues to grow in importance and becomes a *real* role-model for the world – as seems inevitable at present)? And how can this lead to a demanding, effective, and fair global climate protection regime (“Kyoto II”) after 2012?

The fundamental issue of competitiveness is well-known (for the following see Ekardt 2007; Ekardt/ Schmeichel 2008): in a free world market, the EU competes for companies to establish their business on its territory. Thus, nation states in general are becoming increasingly involved in a global “race to the bottom”, with regard to both company taxation as well as the social and climate policies which affect a company’s choice of location (by the way, this market-induced loss of national sovereignty could also be seen as a problem for democracy). Decreasing taxes leading to an empty treasury for social policy is one possible consequence, even though free trade also generates wealth (albeit a form of wealth which may leave the underprivileged behind). In this difficult situation, where poverty is to be reduced in the South and preserving the Western welfare state is also getting more and more difficult, climate policy appears to be a particular burden for the underprivileged (also in the OECD states) who, unlike big enterprises, cannot threaten the national state with relocating abroad (“exit option”).

It can probably be taken for granted that in the medium term climate protection will cease to be a pure cost factor and might even become profitable (e.g. in heat insulation; for the following see IPCC 2007; SRU 2007). In the long term, climate policy is – compared to the costs of climate change – the only option anyway, even from an economic point of view (as we know from the Stern Report). However, current national and European policies still reflect the fear of competitive disadvantage and growing social gaps. Despite all efforts and verbal declarations, climate policy remains rather moderate when measured against the goal of effective climate protection: since 1990 worldwide greenhouse gas emissions have increased by 40 % or even more. While developing countries were not committed to reducing their emissions at all, western nations will fall short of their Kyoto targets to reduce emissions by 5 % by 2012 (which is in itself insufficient). Instead, emissions increased by some 10 % in the OECD countries, despite the collapse of Eastern European industries in 1990. Germany will if anything fall short of its Kyoto target to reduce emissions by 21 %, despite a 14 % reduction being achieved by the collapse of the German Democratic Republic.

However, in order to avoid a global catastrophe induced by concentrations of greenhouse gases in the atmosphere, the OECD countries’ emissions will have to be reduced by some 90 % by 2050, as the per capita emission in Europe still exceeds by many times those in Africa or China. These regions should however be granted a certain increase of emissions in order to help overcome the pressing “southern” poverty.

## **II. Insufficient distributive justice in climate protection? Ambivalent results and the debate on “high energy prices”**

But will a more determined German and European climate policy maybe lead to social problems, such as effects on social distribution *here in Germany and Europe*? This question has been asked from time to time under the headline “environmental justice” but in the context of harmful substances and limit values rather than climate policy. Some may think that national and European climate policy (if the USA, China, India etc. continue to stay more or less inactive) by itself, irrespective of corporate taxation and social policies, weakens European competitiveness on the world market and thus deters companies from investing in

Europe, thereby endangering jobs – especially to the detriment of the socially underprivileged. However, an effective climate policy can create employment in return, e.g. in renewable energies or energy efficiency. This could counter-balance the “jobs-concerning” social disadvantages even in the absence of specific political instruments.

Nevertheless, other social issues of climate protection persist. Renewable energies such as wind and biomass also have ecological ambivalencies (for details see SRU 2007), which might point out energy efficiency and sufficiency (decreased consumption) as more important strategies in climate policy. To this end, most climate policy instruments directly or indirectly increase the price of the fossil energy sources whose usage is at the core of the climate problem (and energy is relevant for almost every product). A former minister’s phrase: “Everyone has the right to fly and drive cheaply” is therefore becoming problematic. Can a family with children really afford the higher building costs for a politically-desirable passive house or a more efficient DVD-player – even if the costs may often be recouped after a period of time? Or must the “cottage in the countryside” plus the trip to get there remain a dream in future? Isn’t the rising cost of energy even a threat to some people’s very existence (and not only a question of social distribution in general)? Put simply: the costs engendered by climate policy might hit a number of socially underprivileged people hard, whereas rising energy costs will not disconcert the wealthy. One can imagine the tabloid headlines in times of “high energy prices”: David Beckham driving a Ferrari – mother with children going by bus. And what about the grandma who has to read by candlelight in the dark because she can no longer afford electricity (as seen in German tabloids in May 2008)? At least the latter is rather polemic, as candles are unlikely to be cheaper than electric light. But how does the situation appear when assessed unemotionally? (for many of the following data see already Wicke 1993; Bülow/ Schwabe 2008)

- Taxes on electricity and petroleum (i.e. the German “eco” tax) as well as the European emission trading scheme for some large enterprises which lead (like a tax) to costs being passed on to consumers do obviously have a “regressive” effect, i.e. they tend to burden especially citizens with low incomes. Due to the higher proportion of energy costs to their income, their financial situation is impacted more severely than the situation of a high earner (though high earners tend to consume more energy per capita).
- In addition, a cut in social security contributions facilitated by “eco tax” receipts (as is the case in Germany) is of no use for certain socially underprivileged groups (like the unemployed – but on the other hand, a cut might make the situation easier for jobseekers).
- Various subsidies programs (e.g. for new heat insulation) and tax reduction incentives primarily serve those who already dispose of a high income. Even the Erneuerbare-Energien-Gesetz (German Act on Renewable Energies, EEG) leads to a situation where those who are able to invest can generate a risk-free return for their investments, because the EEG guarantees fixed prices for every kwh of renewable energy. At the same time, the overall funding has to be raised by the entire population like a tax, since the totality of electricity consumers pays for the fixed prices.

- Every year for instance 840,000 households in Germany are cut off from electricity or gas due to outstanding payments. This does, though, leave the question of fault open. Looking at the remaining marginal share of “climate political” costs per kWh, one can hardly blame primarily climate policy for that. Therefore, the view of environmental policy being “unsocial” begins to seem less secure.
- One can continue: the poor are not burdened by *climate policy* in particular. VAT, for instance, has the same effect for them as climate policy (and in this case people with lower incomes do not even have the chance to escape higher tax charges in a proper way, unlike an “eco” tax which can be avoided by buying energy efficient products etc.). Thus it seems at the least dishonest to accuse climate policy of negative effects on social equality in such a pronounced way.
- A possible response could now be to propose a different social distribution of revenues of forthcoming auctions for emission certificates in national or European emission trading – or of “eco” tax. Most people, however, seem to have the irreconcilable desire for such a higher redistribution but at the same time lower taxes in general; and that does not work.
- It has still to be considered that *climate change* itself is very likely to entail greater social disadvantages for certain groups than all the previous (moderate) climate policy steps taken to prevent it: a) The socially underprivileged will be strained exceptionally by the impending climate change in Germany and Europe. (For financial reasons, they will often not be able to take advantage of the possible steps to prevent or avoid the effects of climate change on them).
- b) Moreover, on a global scale, people living in the southern hemisphere will be the main victims of a changing climate – although they contributed little to its cause.
- c) This is all the more disastrous as worldwide social inequality is already quite pronounced.

Striving for social distributive justice therefore implies a duty to prevent climate change – without neglecting the issue of distribution of the costs. “Lower (consumption boosting) energy prices” do not really align social and climate policy after all, although this is a popular idea in western countries at the moment. Political measures are always compromises and, generally, social redistribution will always have to be paid for by someone in the end. The widespread habit of making contradictory demands – on the one day a commuter compensation (which is to be considered a subsidy to the detriment of the climate supporting primarily people with high incomes), on the other day demanding more climate protection – will take us nowhere.

### **III. The fundamental principle of social climate policy: “One human – one emission right”**

But what does “social distributive justice” (on a national or global level) mean for climate

policy? Once again, a distinctive approach seems to be most appropriate (for more details see Ekardt 2008, Wicke 2005, and Ott 2007; too general and without the most important aspects and arguments Bodansky 2004 and Blok/ Höhne/ Torvanger/ Janzic 2005; a more or less (!) similar approach to a general theory of justice without regard to climate protection, can be found in Habermas 1992):

- It may sound unpopular, but individual wealthy people (the proverbial David Beckham) are not a *main* driving factor, neither in generating assets to be distributed by the welfare state nor with regard to the volume of greenhouse gas reductions.
- Furthermore, the task and the enforceable duty of a liberal society is *only* freedom and “fundamental” preconditions of freedom (see Ekardt 2008), which means the absolute necessities of life, equality before the law and the chance to develop one’s personality (whereas a balancing between these goods is always necessary which also has to take “additional” preconditions of freedom as the other legitimate task of a liberal state into account – which are no subjective rights but only part of the objective law). Beyond these rights, there is no *right* in liberal democratic societies to a substantial equal distribution in a way that everyone is equally entitled to certain goods (“communism”). Details of distribution – which should be seen as aspects of “additional” preconditions of freedom – are therefore within the discretion of political majorities. Put simply: Even without climate policy, not everyone would be able to afford a Ferrari or a flight to Tenerife.
- In the same way as with freedom rights, the fundamental preconditions of freedom lead to an equal treatment of all persons – which requires that everyone is assigned a certain absolute minimum. This includes constraints (e.g. by way of taxes or emission trading) on the wealthy in order to reach a minimum level for all. We propose two arguments for that:
  - Without a right to an equal minimum of fundamental preconditions of freedom, freedom would be worthless for the poor – despite liberal constitutions promising equal freedom rights. This “equal margin of subsistence” (or analogically “basic needs”) means on the one hand, that every human being has to be provided with a certain minimum of energy, and on the other hand, that everybody has to be equally protected against the devastating effects of a climate change by preventive steps to be taken. And even though greenhouse gas emissions must be reduced on an absolute scale, each person needs to emit at least a minimum amount of greenhouse gas to live, and many people worldwide do not reach their “equal” per capita share. It does therefore seem natural to be careful about unequal distribution concerning greenhouse gas emission rights.
  - More importantly: When a public good like the climate becomes tradable, it seems plausible to distribute the “using” rights or the revenues of unequal “use” (of the atmosphere) in equal shares, especially as nobody can claim to have contributed greatly to generate this good. Not “equal wealth” (national or worldwide) but equal emission rights thus stand to reason. This argument can also be seen as a reverse conclusion of the polluter-pays principle – which ultimately stems from freedom (see Ekardt 2008).
- But equal freedom (precondition) rights and the polluter-pays principle are not only to be

valid in Germany or Europe but also globally. When the ultimate amount of greenhouse gases that may be emitted to avoid devastating climate change is distributed, a European could therefore not claim a higher per capita allowance than his counterparts in Africa or our children and grandchildren (who, by the way, cannot really be held responsible for climate change). Not only our but also their freedom is concerned, even though this demands reconsideration of our lifestyle to be sustainable on a global and intergenerational level (i.e. fewer “cottages on the countryside”, driving, flying, meat consumption etc.), which means more sustainability. As we Europeans and Americans have been consuming too much overall, some of us widely exceeding their per capita share of the absolute global emission scale, we consequently have to be held responsible to a greater extent, which means: “one human – one emission right”.

Expressed more generally: The traditional, primarily economic and negative concept of freedom right has to be transformed: a) Freedom presupposes certain equal preconditions which have to be preserved. b) Freedom of future generations and on other continents has to be taken into account. c) Rules are necessary in order to secure freedom in the long term.

#### **IV. Policy instruments for effective and social climate protection**

##### **1. Basic structure of our own approach**

But how can the necessary social climate policy succeed (in Germany and Europe to begin with)? First of all: The best way to affordable energy for every person in the long term is to enforce energy efficiency and the use of renewable energy. In this process, a certain increase in energy prices is probably unavoidable; but problems of competitiveness can in any case be minimized by aiming for European solutions in climate policy.

- The most elegant implementation of a (e.g. European) concept of the “one human – one emission right” would notionally be a European carbon price which harmonises national energy taxes (possibly replacing existing energy taxation and a number of tax benefits), whose revenues would be distributed as a per capita “resources premium” or “eco bonus” to every citizen in the EU. Electricity, petroleum, motor vehicle taxes, tax and pension contributions by the eco tax, maybe even the European emissions trading scheme, could be absorbed in such a system. As everyone benefits from the “resources premium” while the wealthy, going on with a more energy intensive lifestyle, contribute more, the suspected social gap (in Germany or the EU) can be closed.

Most notably, the total effect of this as well as the following systems is that an energy efficient lifestyle or the use of renewable energy will result in profits from the “resources premium” – sticking to “business as usual” lifestyle will incur a loss. This incentive to economize energy benefits the climate as well as the social underprivileged, who generally consume less energy. In combination with adequate “climate pricing” instruments through, the “resources premium” could be a kind of beginning of a European basic income approach.

Four points are to be considered here: a) The whole concept will take us nowhere if other

social benefits from the insurance system etc. are cut in return – therefore an overall view is necessary. b) Higher incomes by a “resources premium” (in this case for the underprivileged) will probably lead to increased energy consumption. To a certain extent, this effect will (and must) also occur in developing countries. Ultimately, this can probably not be avoided altogether. c) It cannot be guaranteed that the “resources premium” optimally reaches the “poorest” as other problems cumulate in the lower class (alcohol abuse etc.) so that additional funds like a “resources premium” will not necessarily stop electricity being cut off from these households etc. d) A “resources premium” (or “eco bonus”) does, unlike the current German electricity and petroleum tax, not reduce the non-wage labour costs so that its impact on the labour market is not straightforward. But a “resources premium” could also lead to wage adjustments which will lower labour costs for the employers. Moreover, a decisive advantage of a resources premium has not yet been mentioned: It is likely to massively increase empirical acceptance of an effective climate policy.

- An alternative to a European energy tax could be an expanded European emissions trading scheme (which could also substitute other national and European instruments) with 100 % of the certificates to be auctioned and based on the primary energy production (and therefore including at least most of the carbon dioxide emissions). The successful bidder would pass on the costs to the consumers and in return, the auction revenues would finance a European resources premium. This would more or less entail that everyone initially has an equal right to use the atmosphere – and everyone has the basic financial means to cover basic energy needs. In principle, the mechanism is the same as for a European energy tax: “price – and a resources premium in return”.
- If neither of these paths are taken (which might be theoretically disappointing but politically possible), a complex overall view could evaluate which means could be replaced by a resources premium, e.g. if auction revenues of the existing emissions trading should contribute etc. Nevertheless, particularly an “overall solution” (i.e. less instruments – a European energy tax or, politically easier to enforce, an expanded emissions trading scheme) would also be truly democratic as the policy choice pro climate protection becomes transparent for every citizen – even in the absence of detailed knowledge of environmental law. Moreover a strict progressive “eco” tax (or similar emissions trading), rising in exactly determined steps increases investment and planning security for citizens and companies and minimizes bureaucracy – which currently suffers from the multitude of instruments with their limited scope and limited effect, being typical for the existing national or European climate policies. Besides, taxes (and emission trading in a way works as a “tax”, too) are liberal and efficient: Each individual is free to decide how to economise energy and where it would be most profitable.
- No matter if the decision falls in favour of primarily “one” of these instruments or of the traditional instrument mix: The effects of subsidies encouraging greenhouse gas emissions (e.g. the commuter tax relief or other support programs) on climate and social policy should be taken into account, too.

These subsidies, as well as financial support for public services such as local public transport are relevant for climate change on the one hand and are not just paid “by the state” but by some groups of citizens in favour of other groups of citizens. (The more “other” instruments are abolished in favour of a energy tax or an extended emissions trading scheme as a form of lean governance, the greater would have to be their effect on prices and a resources premium. It can therefore not be said that “emissions trading alone cannot finance the resources premium” etc.)

- Furthermore, the concept of a social climate policy (implemented through one or a bundle of instruments) has to be spread beyond energy policy. At least conventional agriculture with its methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) emissions and its energy intensity needs better regulation.
- Moreover, the costs arising from “delayed” climate protection measures arising from damage and/or higher adaptation always have to be kept in mind.
- When aiming for new “climate-social” distributive arrangements between citizens and electricity companies or landlord and tenant, it should always be considered that rearrangements can miss their social goals when the costs in the end can simply be passed on to the costumers. Accordingly, rules solving the client/investor (landlord/tenant) dilemma in terms of building insulation may be very important for climate policy, while their impact on social policy might be unclear.
- Whether economic instruments are to be complemented by prohibitions on certain luxury goods (e.g. the so called Chelsea tractors or SUVs) requires further discussion, even though it would probably improve empirical acceptance and therefore the enforceability of climate policy (though the voters who want to go on driving off roaders are not to be underestimated). At least some “social” command and control regulatory instruments like a maximum consumption limit for big cars would have a positive broader effect: the petrol price – to which the “poorer” could for lack of funds not respond in the desired way by buying a “cheaper” energy-efficient car which is to be purchased at higher costs – could decline slightly.
- But how can competitive disadvantages for European companies resulting from a socially motivated climate policy be avoided? Companies might react then with corresponding wage agreements (that take away the effect of the resources premium) and threats to relocate from Europe, thus constraining the climate policy’s “social elements”. A kind of visionary answer for a global social climate policy shall be proposed in the next chapter of this contribution, followed by a short-term practical policy alternative in the concluding chapter.

## **2. Details and the EU proposal for a modified emission trading**

Evidently the concept of “eco” boni or resource premiums raises several questions. Amongst

others, the advantages and disadvantages compared to other instruments have to be considered. The proposed boni also lead to higher budgets of the socially underprivileged, which entails the risk that the whole instrument might not achieve the desired climate effect, but increase activities that are harmful to the climate (or boni money is spent on alcohol etc.). However, it is unclear whether other additional social measures in climate protection (like “low energy prices”) do not raise even more severe problems. Instead of a resource premium, financial support could be granted to energy efficiency measures in households. Such a financial support mechanism would, though, increase bureaucracy far more than a resource premium. Moreover, producers e.g. of domestic appliances might simply raise the prices and thus undermine the social effect of boni. As another social element of climate policy, the use of revenues from a reformed emission trade for financing e.g. heat insulation programmes could be discussed. But besides the administrative effort, it is unclear whether especially the socially underprivileged would benefit. Generally, all these measures may also constitute an inappropriate limitation of freedom.

Furthermore, several problems ensue for the changeover from a bundle of instruments to a (more or less) “single” instrument such as an extended emission trading. As a consequence of the (included) derogation of national “eco” taxes, the revenue from emission trade auctions might then have to finance the national insurance contributions that eco taxes generate at the moment; otherwise, private social insurance contributions would rise dramatically. Nevertheless, the “subsidies” of state pensions should be gradually reduced and the released revenues integrated into the resources premium, as the necessary revenues from extended emission trading for the resource premium could otherwise not be generated.

The already existing continental emission trading in the EU (soon maybe also in the USA) suggests itself as a comprehensive policy instrument, rather than a new taxation concept, just because it already exists. The Commission’s proposal for a new directive on emission trade does, though, fall short of the standards developed in this paper, even though it is a clear improvement compared to the existing European emission trading scheme. In particular, the proposal does not shift from a sectoral approach to a really general emission trade based on primary energy sources. It merely includes some new sectors (like aviation). In the same way, greenhouse gases beyond CO<sub>2</sub> are not included on a broad scale. This irresolute approach is in order to avoid the depreciation of the vast investments in the current emission trading scheme which would be caused by a more radical system change. However, this argument is flawed, as a timely reform would (a) be less trouble and effort than a later one and (b) hold promise of greater success in climate protection, as the system change would lead to cost economisation in the long run (as far as consequential climate damage is concerned). Moreover, (c) the sectoral emission trade and its necessary combination with other policy instruments continuously create high transaction costs. The complex relationship to other policy instruments is thus still subject of the new directive on emission trade (e.g. for the use of auction revenues). Furthermore, (d) the sectoral emission trade only considers distributive justice between states (foreseeing a complex burden sharing). However, this does not benefit the socially underprivileged in member states. Finally, (e) the emission trade which is mostly concerned with CO<sub>2</sub> has to be complemented by a policy instrument for the agricultural by-products methane and nitrous oxide – and also a policy instrument tackling deforestation –

which is missing in the Commission proposal. A possible concept could be an acreage based emission trade, which also appears to be a desirable instrument of general environmental policy as it may cover other detriments of conventional agriculture. It is to be welcomed, though, that the Commission proposal suggests medium-term linear reduction goals (2013-2020: 1.74% per year).

## **V. Global, effective, and social climate policy**

### **1. Basic structure of our own approach**

However, “one human – one emission right” is meant to be not solely a European project, but also a further development of the currently not very ambitious or enforceable Kyoto Protocol on a global scale after 2012 (Kyoto II). Based on the general justification that we gave above, the main elements of a global approach should be:

1. In order to prevent disastrous climate changes, the global per capita emissions allowance would have to be above the current consumption in developing countries, but far below the OECD countries’ emissions. Thereby, the developing countries would be assigned a clear long-term limit – which is incidentally already (more than) reached by countries like China – while the OECD countries would finally have an ambitious goal. Concerning the reduction goal it would be necessary to determine benchmarks, reduction period and extent.
2. If the population of a state wants to exceed their per capita emission rights, an emission trading between states should be initiated, continuing the already existing Kyoto mechanism. Western countries would partly buy certificates, but partly rely on more energy efficiency and renewable energy sources and therefore reduce the overall greenhouse emissions.
3. By these means, a ceiling would be introduced for greenhouse gas emissions and funds mobilised for the reduction of poverty reduction in the southern hemisphere.
4. Beyond mere equal distribution, the value of certificates should be annually degressive as an incentive to reduce greenhouse gas emissions globally. (A gentle introduction results in economically and technically bearable successive steps, probably secured by maximum ceiling prices for certificates.)
5. The per capita emission allowance could be distributed within each country either by emissions trading combined with a resources premium or by energy tax (and a tax or emission trading on land use to cover particularly conventional agriculture) combined with a resources premium. The basic principles of such national (or continental) distribution systems would have to be prescribed on a global level, as otherwise the funds would maybe not reach the really poor. In southern countries, premiums would be high and taxes or emission trading costs low at first, vice versa in the OECD countries. This would only be fair, as the westerners’ higher per capita contribution to climate change would be compensated and at the same time the social justice of climate policy could be more or less preserved in western countries.

6. Moreover, the socially underprivileged in western countries (and of course the people in the south) would benefit from the financial transfers to the south which stimulate the development of welfare states in the south, thereby reducing social dumping and stabilizing the western welfare state in the medium term. Furthermore, a determined attempt to combat climate change might avert the social consequences of this change in North and South, whose severest form emerges already: migration and war for resources such as water.

Beyond these core elements, a global “one human – one emission right” system requires further general conditions such as a global institution with the power to enforce (combined with a mechanism of judicial review as existing today at WTO level) which monitors each state’s emissions and their distribution within the country according to global framework rules. These global framework rules should also define which kinds of national or continental distribution systems (like European emission trading) and social adjustments are permitted. On the national or continental level, a good solution might be to combine emission trading schemes or energy taxation with a resources premium, as we described earlier in this paper. At least, on the global level some structure concerning the use of the profit in developing countries will be necessary (and not just to suggest development funds), as experience shows that the use of funds for purposes other than the struggle against poverty is likely, especially as these countries are often not really democratic.

Another general condition is that, apart from a price ceiling and floor, speculative trading will have to be limited by an intervention right of an international institution (like a world certificate bank). The approach in general would also have to address indirect effects like deforestation or the change of land use, while at the same time not inflating bureaucracy with overly detailed regulation that disrupts the entire system.

It remains an open question how to take into consideration the increase of population (respectively its decrease of northern countries) in the distribution of per capita emission rights. The allowance could be allocated on the basis of a year of reference – or be adjusted from time to time. But a *fixed* basis of calculation seems more sensible with southern population growth in mind, as otherwise population increase (which contributes to poverty and climate problems) would be rewarded. At the same time, a fixed basis would favour the (climate friendly) declining population in OECD countries (although this effect will be partially counterbalanced by migration).

Either way, the proposed procedure avoids problems of fundamental technical infeasibility. Such problems would probably arise if instead of the proposed procedure, a global *personal* per capita emissions trading (personal carbon trading) was established directly. In that case, every citizen of the world would become a certificate merchant, whose everyday climate-relevant actions would be debited on a “credit card”. The European would become a constant buyer; the African would make profits from selling his certificates. In theory, this model’s effect on economy and climate policy is likely to be identical with the aims of “impersonal” carbon trading. But the personal carbon trading in southern countries where most of the people do not have a bank account means unmanageable problems of execution and control. This obviously does not exclude the possibility to – at a much later date – introduce a global personal carbon trading scheme. This would have the major advantage that an allocation of

means benefiting the poor could be addressed more directly.

One could question how selling own emission rights matches the idea “one human – one emission right”. But this question is based on a misunderstanding. First of all, no one is *forced* to sell his or her emission rights. Secondly, the sale is accompanied by a financial compensation (which is particularly beneficial for the developing countries). A more interesting point is that even a further distribution of funds in the developing countries (through a resources premium etc.) will not resolve all social problems in one go. Thus the proposed system does not exclude additional rules and regulations, e.g. the implementation of global social standards within the WTO, which would be an instrument – combined with the proposed new climate policy – against the global “race to the bottom”. Global social standards and the proposed new climate policy could also give back some kind of sovereignty over economy to democratic (national or continental) politics. Apart from that, also the democratization of *global* politics (and maybe the integration of climate policy into a democratized WTO with an own parliament like the EU) remains an important topic.

A fundamental advantage of the proposed model (but also of personal carbon trading) is the high plausibility of its intentions, even without our referring to legal or moral theory. Furthermore, it permits the definition of a fixed level of global greenhouse gas emission, aimed at reducing global warming as much as possible. This approach is also more effective for social policy than fixed but differentiated reduction goals for different countries as under the Kyoto Protocol (which is also the direction the current negotiations for a Kyoto follow-up agreement since the Bali Conference in December 2007 are taking), as our concept leads to a concrete cash flow to the poor (which is probably much more effective than some general and non-binding talk about “technology transfer to the South”). Furthermore, the system of mere (and not very ambitious) goals without attribution per capita and without a sanction mechanism which is enforceable at an international institution has already failed with the Kyoto Protocol.

## **2. Historical emissions and alternative concepts of climate justice**

Our concept of global climate and social justice provides orientation for the further development not only of European climate protection law, but especially for the global Kyoto regime. The current global negotiations will (according to the states’ schedule) be concluded at the end of 2009. Therefore, two points should be made: on the one hand, a further complementing concretisation and on the other hand alternative concepts for climate justice, which (as we think) prove to be less convincing.

The concretization is: The concept of “one human, one emission right” could be amended in order to take into account historical emissions of (especially) OECD states to some degree – furthermore, emission right prices could also incorporate the cost of an (inevitable) adaptation to climate change, insofar as a slight climate change can no longer be prevented. “Historical emissions” consider that especially OECD Member States have been emitting vast amounts of greenhouse gases in the last 200 years which contribute now to climate change in the atmosphere. However, it would (1) not further sustainable protection of freedom by climate protection to simply allow China, India etc. another 150 years of unlimited greenhouse gas

emissions, which would destroy the living conditions of future individuals all over the world. Furthermore, (2) the OECD Member States have not necessarily acquired an “advantage” equivalent to the emitted quantity. Countries like China or India profit on their part from these “advantages” – because they can comparatively rapidly reach an acceptable level of prosperity through imports of economic models and technologies that have been developed in the western world etc. In addition, (3) taking into account “historical emissions” leads to a complex discussion as to how the complex global history in the past centuries may have advantaged and disadvantaged different countries. It is therefore impossible to assign a more or less exact number of emission rights to a possible “historical debt”. Most importantly, (4) invoking historical emissions includes the advantages and disadvantages of deceased individuals and considers nations as collective entities. Given that the above-mentioned justice approach “only freedom and preconditions of freedom” (for a detailed justification see Ekardt 2008) is correct, such a collectivist perspective cannot be justified. Apart from that: Are we really responsible for the acts of our great-grandparents etc.? By the way: The experiences with national allocation plans for European emission trading have already shown that a precise calculation of historically grown emissions is problematic for individual facilities (Bausch/ Lucha 2007).

All this obviously does not militate against the moderate consideration of factors like “historical emissions” and “adaptation costs” (which are up to now only taken into account via global funds) when calculating a price range for an international emission trade – or a delayed integration of countries like China in the whole global system. Insofar as the freedom principle leads to the justification of certain equality standards and from certain basic needs (= fundamental preconditions of freedom) and also to the polluter pays principle, these aspects can be considered when calculating the price range, and that with a minimal administrative effort.

Of course, in the international “Kyoto II debate” (in science and politics) several alternatives to “one human, one emission right” are discussed which are distinguishable particularly by how they deal with historical emissions. A comparison of the different concepts of emission trade (see also Lyster 2007) shows that at least similar issues are addressed. It is often suggested to combine the climate protection requirements under the Kyoto Protocol with the sanction mechanism of world trade law, namely the WTO (Radermacher 2004). Others doubt that world trade sanctions are appropriate for protecting the climate (Rodi 2007). But beyond sanctions, the relationship of world trade law and climate protection have to be assessed anyway (Ekardt/ Susnjar/ Steffenhagen 2008). Therefore, we support the integration of an ecological and social global climate policy into the WTO system anyway.

Most of the few existing approaches presume that each individual in the world has the same emission allowance. Variations occur on the question how to increase the commitment of industrial states while relieving the developing countries. This idea is especially brought forward by Greenhouse Development Rights (GDR), which is not based on equal emission allowances, but focuses on the right to development (Kartha/ Baer/ Athanasiou 2007). A so-called development threshold is introduced to distinguish between the poor and the “consumers” of the world. Those whose income is below the threshold are not burdened with the obligation of greenhouse gas reduction, whereas all others are firstly considered to be able

to pay the costs because of their wealth, and secondly to contribute strongly to climate change by their luxury orientated consumption (capacity and responsibility). The threshold is set to an income of \$ 9,000 per year, the income of the global middle class. The portion of the emission abatement in each state shall correspond to the size of that part of its population whose income exceeds the threshold. The polluter pays principle does therefore only apply to emissions caused by consumption which exceeds basic demands. Through a simple calculation, the Responsibility and Capacity Indicator (RCI) shows how the emission abatement is to be distributed. The percentage of responsibility for emissions of each state is multiplied with its share in the possibility to reduce these emissions. The result tries to show which percentage of the global reduction costs are to be borne by which state. Thereby, the GDR-approach imposes global higher reduction goals in industrial states than could be achieved by reducing emissions in their own country, even if emissions would be reduced to zero. In order to fulfil its obligations, a country should therefore be allowed to finance emission reductions in other (developing) countries, recurring also to (critically viewed) market mechanisms such as emission trade.

The GDR concept uses the social aspect of climate change as a starting point, but is nonetheless unconvincing for a number of reasons. The development threshold of \$ 9,000 will probably by itself mean that states have to reduce less emission than they would be capable of, and that without abstaining from development or combatting poverty in their own country. Though some basic needs (= elementary preconditions of freedom) have to be covered, some emission reductions could be achieved also in this process without neglecting basic needs. It seems untenable to qualify the “global middle class” as in need of development and to find people incapable of being responsible for their own emissions. Furthermore, the GDR concept runs counter to the comments made already on historical emissions. Moreover, an approach focussing on freedom is irreconcilable with the approach of “collective rights to development” of GDR; and the individualistic approach, where regulation is only to be concerned with freedom and preconditions of freedom, has been shown to be philosophically and legally imperative (Ekardt 2008; Ekardt 2007). In addition, GDR seems hardly enforceable, considering that the relatively weak Kyoto Protocol has not been ratified and especially not been enforced by all states. An obligation *exceeding* even a complete stop of emissions of a state will be difficult to sell even in financially strong states. Above all, the factual ability to pay for a certain task does not entail an obligation to do so without any limits, as the approach on social justice above demonstrated. Besides: Also the prevalent discussion on international law in Europe, which mainly displays the Kyoto Protocol affirmatively (see Czarnecki 2008), ignores these concerns in the same way as the tendency of ineffectiveness of global climate policy as a whole.

The much discussed Vattenfall approach does, as GDR, not bank on per capita emission rights, but classifies states according to similar gross domestic products (GDP), also introducing a certain threshold. However, this means that countries below the threshold not only have to buy emission rights, but are also excluded from the global emission trading. The system could only be fully exploited by the states with the highest GDP, whereas countries above the threshold, but with lower GDPs depend on emission allowance “subsidies” on the part of the richer states, as their economies are usually more emission intensive, even though

less prosperous and therefore emitting less from a general perspective. The concept has to be rejected for the mere fact of maintaining or forcing poor states into a dependence on so-called donor countries. The poorest states would be excluded, like they are already from world trade. Climate protection in this form does not have a socio-ecological perspective.

Some approaches are based on equal emission rights, but want to modify them according to historical emissions of certain countries and/or geographical factors, taking into account existing energy supplies and the economic structure in different countries. Should the allowances be distributed by countries, by size of territory, GDP, economic structure (like a right to continuance), average geographic-meteorological conditions or natural resource occurrence in a state? This would be far too complicated. The necessary criteria (a) would be difficult to develop and would entail an enormous bureaucratic effort. How could, for instance, the advantages and disadvantages of different geographical areas be weighed against each other? These and other problems are (b) already known from the “historical emissions” approach. Moreover, (c) an approach centred on freedom is incompatible with a collective orientation on states and territories. Generally we also criticize the “existing” approaches due to their (d) lack of tenable philosophical-legal justification and (e) insufficient concept of how to deal with distributive justice, not only on a global but also on a national (or European) level.

## **VI. Additional border tax adjustments for a Europe which urges forward – solutions for problems of competitiveness**

Returning to the choice of policy instruments: Wisely, the Commission’s proposal for a new directive on emission trading tries to find ways to encourage a new global climate protection agreement and thereby tackles the other big problem apart from distributive justice: competitiveness. As long as global solutions in climate protection seem rather visionary, one could start with an effective and social national or better European climate policy as suggested (by tax or extended emission trading) and complement it by border adjustments (for more details see Ekardt/ Schmeichel 2008; Ekardt/ Susnjar/ Steffenhagen 2008). Products from countries practicing less costly climate policies (for the enterprises) would be “adjusted” at the border when imported into the EU, on the one hand. European producers would get refunds on the higher European energy policy costs when exporting, on the other hand. Otherwise a strongly extended climate policy and fast steps to a carbon free economy will (in contrast to the business-as-usual EU climate policy) lead to serious carbon leakage to other countries. Nevertheless, the returns from the border adjustments should be redistributed to the developing countries with regard to certain socio-ecological criteria – as a first step to a new global climate regime. Furthermore, the developing countries (which usually criticize border adjustments, maybe even in case of redistribution) should be reminded of the long-term goal: a global contract (which should be forced by border adjustments) against climate change – which will especially harm the poor in southern countries.

Such border adjustments do not discriminate against anybody in global free markets and therefore do not violate WTO rules, as they make sure that whoever refuses to protect the climate (like the USA or China) will not be granted an unfair advantage by eco-dumping.

Border adjustments do not spare us to rethink our lifestyle in response to energy taxes or an extended emission trading (which will make energy more expensive); and even without competitive disadvantages on the world market, the higher energy prices will act to the detriment of some industries. But border adjustments allow the EU to act as a role model for countries like China, India and or the USA in advancing an effective and social (and economically prospering) climate policy. This may be the only way to stimulate action for a global, effective and social climate policy. And a global problem needs a global willingness to act at the end of the day.

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