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REVIEW

EU Enforcement Policy of Community Environmental law
as presented in the Commission Communication
on implementing European Community Environmental law

Marta Ballesteros

The direct effect of the Aarhus Convention
as seen by the French 'Conseil d'Etat'

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Practical application of Article 9 of the Aarhus Convention
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The imperative to move forward

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Current discussions on the proposal for an Industrial Emissions
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Why patents are crucial for the access of developing countries
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Editorial

It has been nearly ten years now since the *Aarhus Convention* entered into force and imposed on parties and public administrations obligations regarding access to information, public participation in decision-making and access to justice. Since then, practitioners have gained diverse experiences on the practical application of the three pillars' provisions, and their implementation into national laws and related issues, e.g. enforcement. This issue of the *elni Review* includes valuable insights into this matter.

Special focus in this issue is placed on the currently discussed revision of the *IPPC Directive* takes a special place in this issue of the *elni Review*. This topic will also be continued in the next issue of the journal to reflect the ongoing discussion. As previously announced, *elni* is planning an *elni Conference* (see page 46 of this journal), a major event by the end of 2010, on the Industrial Emissions Directive. Therefore, you are invited to send us your contribution for the *elni Review* and, if you are willing to discuss it with others, you are naturally welcome to submit a proposal for the event, too. Soon, there will be an official call on our webpage (www.elni.org) providing further information on the conference.

This issue 2/2009 of the *elni Review* offers the following contributions:

In her article on the Conference "EU Enforcement Policy of Community Environmental law as presented in the Commission Communication on implementing European Community Environmental law" which took place on 8 July 2009 in Brussels, *Marta Ballesteros* discusses the implementation of European Community Environmental Law enforcement and its interaction with the Aarhus Convention and other European Laws.

"The direct effect of the Aarhus Convention as seen by the French 'Conseil d'Etat'" is the subject of the article by *Julien Bétaille*. His article provides detailed insights on the implementation and practical application of the Aarhus Convention in France.

"Practical application of Article 9 of the Aarhus Convention in EU countries: Some comparative remarks" by *Pavel Černý* discusses several specific topics from this field which can be considered crucial to legal protection of the environment in practice. The article also addresses the contributions and discussions presented at the „International conference on the implementation of the Aarhus Convention in practice“.

The article "Environmental Inspections at the EU: The imperative to move forward" by *Ana Barreira* reflects the point of view of the EEB on compliance and enforcement of European Environmental Law.

Further *Christian Schaible* addresses the EEB's position on the revision of the IPPC Directive in his article "Current discussions on the proposal for an Industrial Emis-

sions Directive: Stronger role for Best Available Techniques?".

National specifics of the IPPC Directive in practice are shown from a British point of view by *Lesley James*. She comments on the "Aberthaw Power Station: An IPPC case study".

"Why patents are crucial for the access of developing countries to Environmentally Sound Technologies" is explained by *Michael Benske*.

This issue of *elni Review* also provides two conference reports:

Nicola Below reports on the *elni forum 2009* "The Directive on Industrial Emissions and its implementation in national law – key issues and practical experiences", which took place at CEDRE in Brussels on 14th May 2009.

The contribution by *Marie-Catharine van Engelen* reports on the congress "European Environmental Law in Belgium and the Netherlands", which took place in Rotterdam on 15th May 2009.

Moreover, this edition of *elni Review* covers some interesting news on the German failure to codify its fragmented environmental law, a special edition of *elni Review*, which will be published next year, the *elni Conference 2010*, recent EIA developments, and positive developments in Slovakian access to justice.

The next issue of the *elni review* will not have an overarching focus. Contributions on the IED/IPPC revision process are nevertheless very welcome. Please send contributions on this topic as well as other interesting articles to the editors by mid-January 2009.

Nicolas Below/Martin Führ

October 2009

Conference on Environmental Law and Policy in the European Union

on Thursday 19th of November 2009

at the *University of Amsterdam, The Netherlands*

***“Environmental Law and Policy in the
European Union:
The Legacy of the Treaty of Amsterdam”***

On the occasion of the inaugural lecture of Professor Marc Pallemarts on 20 November 2009, the Centre for Environmental Law is organising a conference.

Please confirm your participation under:
<http://www.jur.uva.nl/cel>

Why patents are crucial for the access of developing countries to Environmentally Sound Technologies

Michael Benske

1 Introduction

This article will demonstrate why Global Climate Funds might establish unexpected barriers to transfers of Environmentally Sound Technologies (EST) to developing countries rather than facilitating them.

During political dialogues, developing countries frequently stress their discontent regarding Intellectual Property Rights (IPR) protecting EST. A typical objection raised by the Group of 77¹ and China reads: "The present restraint on access to advanced technologies, imposed particularly by the IPR regime, need [sic] to be lifted, [...]"² The Group of 77 and China expect developed countries to facilitate technology transfers and to provide other assistance by various financial and regulatory means. The proposed measures include a Global Climate Fund.

At first, this article will identify the relevant actors' interests and, to demonstrate that inter-governmental measures for tackling the Greenhouse Gas (GHG) problem are justified, carry out an analysis according to the behavioural model of the homo oeconomicus institutionalis.³ In the second part, the role of IPR in the context of transfers of EST to developing countries will be examined. The third part of this article deals with the question of what the overall objectives of technology transfer measures are and why the proposed Global Climate Fund might not be an adequate instrument for facilitating these transfers.

2 Justification of inter-governmental measures

The objective of this analysis is to evaluate the probable effectiveness of technology transfer measures that

aim at mitigating the worldwide GHG emissions; in particular, the concept of a Global Climate Fund, proposed by the Group of 77 and China with the goal of reducing IPR barriers for access to EST, will be looked at.

The following part of the analysis shall demonstrate why, in general, action on inter-governmental level is justified and necessary for facilitating transfers of EST to developing countries.

2.1 Which actors influence transfers of EST?

To highlight what roles a range of factors play in affecting the availability and diffusion of EST in developing countries, firstly, it is necessary to identify the actors involved in transfers of EST.

While nearly all humans contribute to GHG emissions because their improved living standards are based on GHG-emitting processes, only certain groups of actors appear to have the power to actually affect transfers of EST.

By now on the highest level of actors – the state level and the state union level – the problem of climate change and also the responsibility to find ways for mitigating GHG emissions appears to be generally recognized. Laws and other policies created on this level can affect transfers of EST.

The subordinate actors – industries and companies – can be identified to be contributing to GHG emissions directly or indirectly and to have some power to facilitate the mitigation thereof.

The individuals' capacity to affect transfers of EST appears to be limited: firstly, decisions influencing technology transfers are made on other levels of action and secondly, other interests than GHG issues tend to dominate their daily routine.⁴

2.2 The actors' interests

As demonstrated above, actions that have impact on transfers of EST to developing countries could be taken on the company, industry and country/inter-country levels. These actors' interests shall be looked at in greater detail in the following.

¹ The Group of 77 at the United Nations is a coalition of currently 130 developing countries, founded to jointly represent the members' economic interests. Further information available online at: <http://www.g77.org>.

² Mr Mukhdoom Syed Faisal Saleh Hayat, Minister for Environment and Special Envoy of the President of Pakistan, on behalf of the Group of 77 and China. High-Level Event on Climate Change, entitled 'The Future in our Hands: Addressing the Leadership Challenge of Climate Change', New York, 24 September 2007.

³ This model was set up by the Society of Institutional Analysis (sofia) in Germany for predicting the behaviour of organizations by taking into account the rational choice paradigm, surrounding institutions and other possible preferences. For a detailed description of the behavioural model and its background, see: Martin Führ, Kilian Bizer, Peter-H. Feindt, Menschenbilder und Verhaltensmodelle in der wissenschaftlichen Politikberatung – Möglichkeiten und Grenzen interdisziplinärer Verständigung, Interdisziplinäre Studien zu Recht und Staat, Baden-Baden (Nomos) 2007; Kilian Bizer, Martin Führ, Christoph Hüttig, Responsive Regulierung – Beiträge zur interdisziplinären Institutionenanalyse und Gesetzesfolgenabschätzung, Tübingen (Mohr Siebeck) 2002; and an example of its application in the context of REACH: Martin Führ, Kilian Bizer, REACH as a paradigm shift in chemical policy – responsive regulation and behavioural models, Journal of Cleaner Production xx (2005) pp. 1-8, Elsevier, download at: http://www.sofia-research.com/fileadmin/Dokumente/Zeitschriften/article1276_mf.pdf.

⁴ In fact, the consciousness of climate change is well developed in industrialised countries. In developing countries, the awareness raising is at early stages of development moreover, even though persons who are aware of the problem tend to take it seriously, other issues such as war, poverty and unemployment are considered to be more pressing. See Anthony Leiserowitz, International Public Opinion, Perception, and Understanding of Global Climate Change, Human Development Report 2007/2008, 2007/31, pp. 3-6. Available online at: http://hdr.undp.org/en/reports/global/hdr2007-2008/papers/leiserowitz_anthony6.pdf.

- On the company level:
Companies are subject to economic competition. Here, the rational choice paradigm is naturally dominating their choice of actions. As their customers (companies and individuals) usually follow the most economically viable way and are rarely willing to pay a bonus for 'green' products, it is only attractive to companies to implement EST if there is either no other choice or its cost is not higher than the cost of conventional technology.
- On the industry branch level:
While individual companies within one branch of industry are subject to competition, for the industries as a whole, economic competition is not usually an issue.⁵ This means that the industry level may be a suitable starting point for approaching the goal of mitigating GHG emissions because here, while economic considerations influence the industries' actions to a certain extent, they do not necessarily dominate the choice of action. This requires that the reduction of GHG emissions is an objective recognized by the industry's host country, and is recognized as an important challenge by the national public, which has a certain direct⁶ or indirect⁷ impact on the industries preferences.
- On the state level:
The problem of climate change and the need for GHG emissions to be mitigated appears to be generally recognized, considering the existence of the UNFCCC⁸ and the eventual ratification of the Kyoto Protocol⁹ (with the exception of the USA). However, while it applies to all countries, it is of particular importance for developing countries that economic growth and the improvement of living standards are not impeded by any other measures, such as those aiming at reduction of GHG emissions. It cannot be assumed that these goals will be sacrificed by individual countries, especially not by developing countries. For the most part, the obstacles for economic development can be seen in a possible loss of competitiveness with other countries' economies.
- On the inter-state level:
Moving to the highest level of actors – the inter-

country level – where also the economic rise of developing countries and the improvement of living standards worldwide is a concern, the issue of climate change and the need for reduction of GHG emissions is recognized at the same time as a "common but differentiated responsibility"¹⁰ in the UNFCCC.

Therefore, on the inter-country level it should be possible to balance the interests from a bird's eye view and find solutions which are viable to all. The fact that acceding to inter-country agreements is rather voluntary even might help to make such agreements more equitable, assuming the parties involved all share a genuine interest in mitigating the climate change effects.

2.3 Potentials for reducing GHG emissions

The reason behind the reluctance of companies to adopt EST in both developed and developing countries is the expectation that the use of EST reduces a company's competitiveness by making identical products more expensive. From a more global point of view, however, the potential extra costs to the world economy¹¹ could be justifiable, particularly as they would also reduce the accumulation of long-term costs due to climate change.

Considering this, policies that force companies to mitigate their GHG emissions, in principle, are justifiable. However, a policy directly enforcing this goal is not desirable as it would interfere too much in the free market economy and might distort fairness of competition.

The objective should be to uphold an environment of fair competition, i.e. not to add any elements that would distort competition among the actors on all levels: company level, industry level and country level.

As a result, incentives for the use of EST must be created on the inter-country level to tackle this issue and it must be assured that economic competition remains as it is now. This can be carried out by establishing an additional and internationally effective factor that all companies have to take into account. While the decision of whether or not to make use of EST may be at their own discretion, the use of EST should be generally more economically viable, and therefore be the obvious choice of action.

The actual implementation of these incentive measures could be carried out by the creation of a mutually binding international policy.

⁵ An exception is the case that industries compete with each other as they aim at the same goal or product. This depends on how narrowly or broadly the industry is defined. For this article, the definition of the term "industries" shall be broad enough to exclude competition with other industries and also competition among industries in different countries, e.g. "transportation" and "electricity generation" industries.

⁶ E.g. respecting taboos to uphold a good image of the industry.

⁷ E.g. when national laws reflect national public preferences.

⁸ United Nations, United Nations Framework Convention on Climate Change, 1992, FCCC/INFORMAL/84, GE.05-62220 (E) 200705.

⁹ United Nations, Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998.

¹⁰ According to Principle 7 of the 1992 Rio Declaration on Environment and Development: "The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command."

¹¹ In fact, from a global and inter-industry point of view, more use of EST might even help to create additional jobs.

2.4 Inter-governmental incentive measures

A binding inter-governmental policy with the objective of mitigating the worldwide GHG emissions to the most possible extent needs to be created.

While on the broader level of acknowledging the climate change issue and agreeing on GHG emission mitigation commitments this has taken place in the form of the UNFCCC and the Kyoto Protocol, a policy for creating incentives that make the use of EST more economically viable than the non-use of EST is yet to be found - particularly in developing countries where the introduction of EST appears to be particularly cost-intensive when considering the lower expenses of the industries' day-to-day operation. While countries are bound by the UNFCCC and the Kyoto Protocol commitments and they could cap their industries' GHG emissions by pursuant legislation, such measures are likely to lead to distortion of the country's economy. Such measures are only feasible if alternatives are provided to the industries. This leads to the key question of how transfers of EST can be facilitated.

It is necessary to take into account all relevant factors that affect both the industries' willingness to use EST and also the willingness of EST owners to provide EST.

Therefore, to achieve the goal of worldwide GHG emission mitigation:

1. The availability of EST and the distribution of ownership thereof must be identified.
2. The parameters that affect the willingness of EST owners to transfer their technology, including IPR ownership, IPR protection and other market factors, need to be identified.
3. Incentive measures must be able to meet the following objectives:
 - a. Make companies in developing countries willing to acquire and use EST.
 - b. Make EST owners more willing to transfer technology to developing countries.

These three factors will be analysed in the following.

3 Availability of ESTs

To determine the extent to which developing countries have potential access to EST, the owners of the relevant technologies need to be first of all identified.

No monopolistic ownership structure appears to be established for IPR in the field of EST, according to PATSTAT data.¹² While Japanese inventors are the world leaders in IPR ownership in the relevant fields

of technology with a share of 40.8 %, ¹³ the next two major players are the USA and Germany, followed by three emerging economies: China, South Korea and Russia.¹⁴ It appears that particular fields of EST are concentrated in various countries.

The developing countries indicated above are no exception to this fact; China focuses on the cement, geothermal, solar, hydro and methane fields.¹⁵ The field with the highest market share owned by inventors from the same country is solar energy, in which China dominates the market with a share of 38 %.¹⁶ Even this cannot be seen as a monopoly. Considering the heterogeneous distribution of IPR ownership among countries, a company-level evaluation would be even more likely to show that no monopolistic ownership structure exists.

While the share of IPR ownership in the field of EST is still lower in the indicated emerging economies compared to the developed countries, the annual growth rate of the innovations patented by emerging countries grew at an average of 18 % between 1997 and 2003, which is higher than in developed countries.¹⁷ In summary, IPR ownership in the field of EST can be seen as evenly spread and subject to substantial competition globally.

Beyond the issue of IPR, it must also be considered that there is a range of ESTs in the public domain.¹⁸ These technologies could also be used to address the GHG mitigation goals. The fact that the technologies are not protected by IPR has or may have the following effects:

1. The core technology can be freely acquired and absorbed.
2. Know-how owners may be reluctant to transfer their knowledge as legal protection is limited and subject to contracts with the transferee.
3. Absence of IPR does not necessarily make the technology cheaper.

To conclude, the market environment can be identified as a barrier for successful technology transfers to developing countries – rather than the existence of IPR. The willingness of the companies to provide EST to developing countries is determined by many market factors. No matter whether ESTs are protected by IPR or not, generally also know-how needs to be transferred. Know-how is not protected by IPR but rather as a trade secret. For this reason, if know-how is to be transferred, the reliability and trustworthiness of the

¹² This has been extensively investigated in Dechezleprêtre, *Invention and Transfer of Climate Change Mitigation Technologies on a Global Scale* (2008). Available online at: http://www.nccr-climate.unibe.ch/conferences/climate_policies/working_papers/Dechezlepretre.pdf.

¹³ See Dechezleprêtre, *supra* note 12, p. 17.

¹⁴ See Dechezleprêtre, *supra* note 12.

¹⁵ See Dechezleprêtre, *supra* note 12.

¹⁶ DG Trade/ Copenhagen Economics, *Are IPR a Barrier to the Transfer of Climate Change Technology?* (2009), p. 5. Available online at: http://trade.ec.europa.eu/doclib/docs/2009/february/tradoc_142371.pdf.

¹⁷ See Dechezleprêtre, *supra* note 12, p. 20 et seq.

¹⁸ See DG Trade/ Copenhagen Economics, *supra* note 16, p. 10.

receiving party is crucial. Therefore, it can be assumed that the existence of at least some legal protection of IPR-protected technology against unauthorised absorption of the knowledge (as opposed to technology not protected by IPR) might even facilitate export technology to developing countries. Also, in relevant technical literature it is recognized that IPR do not automatically cause a barrier to access to technology as there is usually competition on price and features with substitute products that may be both IPR-protected and non IPR-protected technology.¹⁹

4 Transfers of EST to developing countries

Before discussing the question of how transfers of EST to developing countries may be facilitated, the objective of technology transfer measures should be clarified. While it is well-acknowledged that the emerging economies are not the main polluters and therefore not the main causers of anthropogenic climate change historically, it is also recognized that climate change is a worldwide problem and for this reason a shared responsibility among all GHG emitters. According to the Art. 2 of the UN Framework Convention on Climate Change (UNFCCC), the objective of the efforts of the convention members is “*stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system*”. More precisely, according to Art. 4(5) of the UNFCCC, the developed countries listed in Annex II shall “*take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of or access to environmentally sound technologies and know how*”, particularly to developing countries. Further, the developing countries’ implementation of the convention commitments is linked to the implementation of commitments related to financial resources and transfer of technology by the developed (Annex II) countries according to Art. 4(7) of the UNFCCC.

The Clean Development Mechanism (CDM), defined in Art. 12 of the Kyoto Protocol, is a tool that does not only make meeting the objectives more economically viable for developed countries, but is also leading to transfers of EST to less developed countries. One implied objective of the UNFCCC regulations and the Kyoto Protocol is certainly that the BRIC countries (Brazil, Russia, India and China) will make more use of EST, either after own acquisition or development of EST, or through self-determined technology transfer by developed countries in conjunction with the CDM. The ultimate objective is the worldwide use of efficient, sustainable EST. Based on patent statistics, the Kyoto Protocol appears to have boosted the number of

innovations in the field of EST substantially.²⁰ However, according to the same statistics, the impact seems not to be significant on the number of international technology transfers.²¹ These developments demonstrate that climate policy can be an incentive to innovative activity but is not in all cases a suitable tool for facilitating technology transfers. The individual companies determine their strategies based on many market factors, some of which might outweigh incentives embodied in policies.

4.1 Viability of a Global Climate Fund

As climate change is a trans-boundary issue, establishing a global climate fund may be a viable measure for mitigating GHG emissions worldwide, according to some opinions. It has been suggested by some countries, for instance by China,²² that a worldwide *Technology Development and Transfer Fund* would be a desirable approach to mitigate worldwide GHG emissions. Such a worldwide fund, mainly or fully based on contributions from developed countries, shall establish a patent pool for a range of EST, available to mainly developing countries without present access to these technologies. However, it must be considered that the IPR owners in any field are normally private companies, public-private entities or institutions such as universities, all of which enjoy great autonomy. Therefore, considering the rule-of-law principles, no technology transfers could be imposed on the IPR owners.

4.2 Prerequisites for building up a patent pool

If a patent pool with voluntary participation is established, the participants must consider it economically viable to license their innovation, i.e. the compensation paid to them must be equal or higher compared to the estimated income generated by ‘business as usual’. Such a patent pool may lead to one or more of the following scenarios:

1. The quality of technology innovation decreases as IPR owners rely on income from the technology fund irrespective of the price of their products and/or quality competitiveness (competitiveness would thus be determined by the provision of subsidies).
2. Poor bargaining position for the fund facilitator because of the need to acquire technology, resulting in inappropriate compensations paid.

¹⁹ For A range of relevant literature on IPR as a barrier for technology transfers examined, see: DG Trade/ Copenhagen Economics, *supra* note 16, p. 10 et seq.

²⁰ See Dechezleprêtre, *supra* note 12, p. 12 et seq.

²¹ The number of technology transfers is derived from the number of patent applications in countries other than the innovator’s home country in Dechezleprêtre’s study.

²² Mr. Zhang Ping, Chairman of the National Development and Reform Commission of the PRC, suggested a “*Technology Development and Transfer Fund*” to be established during the Beijing High-level Conference on Climate Change, 7-8 November 2008, <http://www.ccchina.gov.cn/bjctc/WebSite/bjctc/UpFile/File123.pdf> (accessed on 3 June 09).

3. Distortion of public/private tasks and duties; companies may aim their activities at compliance with the policy, not at actual economic and environmental needs.
4. All in all, no sustainable process of technology development and technology use.

4.3 Challenges beyond licensing

When it comes to the actual transfer of the acquired EST to developing countries, one or more of the following problems may be encountered:

1. The IPR ownership/licensing problems are overcome, but this does not include expertise or know-how, which are crucial to application of the transferred technology. The innovator is under no obligation to provide these; this may either result in additional costs or in failure of the actual use of the technologies.
2. The technologies acquired may not be suitable for application in each country and environment, e.g. due to a lower quality of fuel, geological particularities, etc.
3. The technologies acquired and transferred may be usable in the receiving countries, but not be the most economically and ecologically viable as opposed to technologies the countries would choose if acquiring EST themselves.

In the very unlikely and disputable case that technology transfers to the patent pool and then to third countries are forced - e.g. in a way similar to compulsory licensing of medicine²³ - this would firstly be a breach of the rule-of-law principles and would secondly be unwelcomed by the affected companies as a major intrusion in the free market economy. From the point of view of IPR owners and the entire industries, it is likely to be a form of economic parasitism. While the receiving developing countries and their industries benefit, the sender companies or industries are unlikely to be appropriately recompensed for losing competitive advantages.

4.4 Predicted reactions of IPR owners

Following the above train of thought, it is likely that the companies concerned would abstain from patent protection for their future innovations and rather protect them as trade secrets by keeping them confidential.

The consequences of a shift to trade secret protection would be:

1. Forceful technology transfer could not be continued.
2. More monopolisation of technologies as technical information is kept secret and not disclosed in pat-

ent specifications, also leading to impediments of sector-wide research.

3. Many more reservations regarding exports to countries with doubtful economic and political environments due to lack of legal protection of the innovations.
4. Failure of a potential Technology Development and Transfer Fund.

In summary, a globally funded patent pool would probably not contribute to the availability of EST in developing countries in long-term and may even have contrary effects.

5 Conclusion

The assumed failure of the proposed Technology Development and Transfer Fund does not mean that all technology transfer funds are destined to fail, but that they would need to be implemented in a carefully selective and reciprocally viable way. When considering previous experiences with global technology acquisition funds aiming at the introduction of EST, such as the fund established for the implementation of the Montreal Protocol, it has to be noted that, due to the nature of the GHG problem, the range of technological needs and solutions for tackling the mitigation of GHG emissions is enormous, as opposed to the circumstances for protecting the ozone layer, which is the Montreal Protocol's objective. This would make an efficient, case-by-case choice of technologies for acquisition difficult. Also, with respect to this previous experience, it turned out that IPR were less of an obstacle than expected.²⁴ To sum up, for facilitating the use of EST in developing countries, a combination of various policies is most likely to be successful. These policies should be aiming at the following interconnected objectives:

1. Restricting GHG emission allowances, equally for all companies worldwide, coinciding with:
2. Financial incentives to use EST rather than conventional technology;
3. Improving the frameworks of IPR protection;
4. Reducing trade barriers and other market entry difficulties, including facilitation of transparency, reduction of taxation and other intrusions in the free market economy.

For achieving these goals, a wide, multidisciplinary array of actions is inevitable for tackling the challenge of mitigating GHG emissions worldwide.

²³ While there are typically monopolistic structures in the field of pharmaceuticals, this does not apply to the field of EST; this would make it difficult to find a good rationale for applying the compulsory licensing model here.

²⁴ ICTSD, *Climate Change, Technology Transfer and Intellectual Property Rights* (2008), p. 8. Available online at: http://www.iisd.org/pdf/2008/cph_trade_climate_tech_transfer_ipr.pdf.

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elni membership

If you want to join the Environmental Law Network International, please use the membership form on our website: <http://www.elni.org> or send this form to the **elni Coordinating Bureau**, c/o IESAR, FH Bingen, Berlinstr. 109, 55411 Bingen, Germany, fax: +49-6721-409 110, mail: Roller@fh-bingen.de.

The membership fee is €52 per year for commercial users (consultants, law firms, government administration) and €21 per year for private users and libraries. The fee includes the bi-annual elni Review. Reduced membership fees will be considered on request.

Please transfer the amount to our account at **Nassauische Sparkasse** – Account no.: **146 060 611, BLZ 510 500 15**, IBAN: DE50 5105 0015 0146 0606 11; SWIFT NASSDE55XXX.

“Yes, I hereby wish to join the Environmental Law Network International.”

Name: _____

Organisation: _____

Profession: _____

Street: _____

City: _____

Country: _____

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Date: _____

The Öko-Institut (Institut für angewandte Ökologie - Institute for Applied Ecology, a registered non-profit-association) was founded in 1977. Its founding was closely connected to the conflict over the building of the nuclear power plant in Wyhl (on the Rhine near the city of Freiburg, the seat of the Institute). The objective of the Institute was and is environmental research independent of government and industry, for the benefit of society. The results of our research are made available of the public.

The institute's mission is to analyse and evaluate current and future environmental problems, to point out risks, and to develop and implement problem-solving strategies and measures. In doing so, the Öko-Institut follows the guiding principle of sustainable development.

The institute's activities are organized in Divisions - Chemistry, Energy & Climate Protection, Genetic Engineering, Sustainable Products & Material Flows, Nuclear Engineering & Plant Safety, and Environmental Law.

The Environmental Law Division of the Öko-Institut:

The Environmental Law Division covers a broad spectrum of environmental law elaborating scientific studies for public and private clients, consulting governments and public authorities, participating in law drafting processes and mediating stakeholder dialogues. Lawyers of the Division work on international, EU and national environmental law, concentrating on waste management, emission control, energy and climate protection, nuclear, aviation and planning law.

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The University of Applied Sciences in Bingen was founded in 1897. It is a practiceorientated academic institution and runs courses in electrical engineering, computer science for engineering, mechanical engineering, business management for engineering, process engineering, biotechnology, agriculture, international agricultural trade and in environmental engineering.

The *Institute for Environmental Studies and Applied Research* (I.E.S.A.R.) was founded in 2003 as an integrated institution of the University of Applied Sciences of Bingen. I.E.S.A.R. carries out applied research projects and advisory services mainly in the areas of environmental law and economy, environmental management and international cooperation for development at the University of Applied Sciences and presents itself as an interdisciplinary institution.

The Institute fulfils its assignments particularly by:

- Undertaking projects in developing countries
- Realization of seminars in the areas of environment and development
- Research for European Institutions
- Advisory service for companies and know-how-transfer

Main areas of research:

- **European environmental policy**
 - Research on implementation of European law
 - Effectiveness of legal and economic instruments
 - European governance
- **Environmental advice in developing countries**
 - Advice for legislation and institution development
 - Know-how-transfer
- **Companies and environment**
 - Environmental management
 - Risk management

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The Society for Institutional Analysis was established in 1998. It is located at the University of Applied Sciences in Darmstadt and the University of Göttingen, both Germany.

The sofia research group aims to support regulatory choice at every level of public legislative bodies (EC, national or regional). It also analyses and improves the strategy of public and private organizations.

The sofia team is multidisciplinary: Lawyers and economists are collaborating with engineers as well as social and natural scientists. The theoretical basis is the interdisciplinary behaviour model of *homo oeconomicus institutionalis*, considering the formal (e.g. laws and contracts) and informal (e.g. rules of fairness) institutional context of individual behaviour.

The areas of research cover

- Product policy/REACH
- Land use strategies
- Role of standardization bodies
- Biodiversity and nature conservation
- Water and energy management
- Electronic public participation
- Economic opportunities deriving from environmental legislation
- Self responsibility

sofia is working on behalf of the

- VolkswagenStiftung
- German Federal Ministry of Education and Research
- Hessian Ministry of Economics
- German Institute for Standardization (DIN)
- German Federal Environmental Agency (UBA)
- German Federal Agency for Nature Conservation (BfN)
- Federal Ministry of Consumer Protection, Food and Agriculture

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elni

In many countries lawyers are working on aspects of environmental law, often as part of environmental initiatives and organisations or as legislators. However, they generally have limited contact with other lawyers abroad, in spite of the fact that such contact and communication is vital for the successful and effective implementation of environmental law.

Therefore, a group of lawyers from various countries decided to initiate the Environmental Law Network International (elni) in 1990 to promote international communication and cooperation worldwide. Since then, elni has grown to a network of about 350 individuals and organisations from all over the world.

Since 2005 elni is a registered non-profit association under German Law.

elni coordinates a number of different activities in order to facilitate the communication and connections of those interested in environmental law around the world.

Coordinating Bureau

The Coordinating Bureau was originally set up and financed by Öko-Institut in Darmstadt, Germany, a non-governmental, non-profit research institute.

Three organisations currently share the organisational work of the network: Öko-Institut, IESAR at the University of Applied Sciences in Bingen and sofia, the Society for Institutional Analysis, located at the University of Darmstadt. The person of contact is Prof. Dr. Roller at IESAR, Bingen.

elni Review

The elni Review is a bi-annual, English language law review. It publishes articles on environmental law, focusing on European and international environmental law as well as recent developments in the EU Member States. It is published by Öko-Institut (the Institute for Applied Ecology), IESAR (the Institute for Environmental Studies and Applied Research, hosted by the University of Applied Sciences in Bingen) and sofia (the Society for Institutional Analysis, located at the University of Darmstadt). The Coordinating Bureau is currently hosted by the University of Bingen. elni encourages its members to submit articles to the Review in order to support and further the exchange and sharing of experiences with other members.

elni Conferences and Fora

elni conferences and fora are a core element of the network. They provide scientific input and the possibility for discussion on a relevant subject of environmental law and policy for international experts. The aim is to gather together scientists, policy makers and young researchers, providing them with the opportunity to exchange views and information as well as to develop new perspectives.

The aim of the elni fora initiative is to bring together, on a convivial basis and in a seminar-sized group, environmental lawyers living or working in

the Brussels area, who are interested in sharing and discussing views on specific topics related to environmental law and policies.

Publications series

- Access to justice in Environmental Matters and the Role of NGOs, de Sadeleer/Roller/Dross, Europa Law Publishing, 2005.
- Environmental Law Principles in Practice, Sheridan/Lavrysen (eds.), Bruylant, 2002.
- Voluntary Agreements – The Role of Environmental Agreements, elni (ed.), Cameron May Ltd., London, 1998.
- Environmental Impact Assessment – European and Comparative; Law and Practical Experience, elni (ed.), Cameron May Ltd., London, 1997.
- Environmental Rights: Law, Litigation and Access to Justice, Deimann/Dyssli (eds.), Cameron May Ltd., London, 1995.
- Environmental Control of Products and Substances: Legal Concepts in Europe and the United States, Gebers/Jendroska (eds.), Peter Lang, 1994.
- Dynamic International Regimes: Institutions of International Environmental Governance, Thomas Gehring; Peter Lang, 1994.
- Environmentally Sound Waste Management? Current Legal Situation and Practical Experience in Europe, Sander/Küppers (eds.), P. Lang, 1993.
- Licensing Procedures for Industrial Plants and the Influence of EC Directives, Gebers/Robensin (eds.), P. Lang, 1993.
- Civil Liability for Waste, v. Wilimowsky/Roller, P. Lang, 1992.
- Participation and Litigation Rights of Environmental Associations in Europe, Führ/Roller (eds.), P. Lang, 1991.

Elni Website: elni.org

On the elni website www.elni.org one finds news of the network and an index of articles. It also indicates elni activities and informs about new publications. Internship possibilities are also published online.