Erkki J. Hollo (toim. / ed.)

Kansallinen oikeus ja liittovaltioistuva Eurooppa

National Law and Europeanisation

SUOMALAINEN LAKIMIESYHDISTYS • HELSINKI

Tilausosoite / Publisher & orders
Suomalainen Lakimiesyhdistys
Kasarmikatu 23 A 17
00130 Helsinki
p. (09) 6120 300, f. (09) 604 668
sly@lakimies.org
www.lakimies.org

Kannen suunnittelu / Cover: Heikki Kalliomaa
Kannen kuva / Cover picture: Perry-Castañeda Library Map Collection,
University of Texas, Austin, Texas, USA.

ISSN-L 1458-0446
ISSN 1458-0446
ISBN 978-951-855-288-1

Gummerus Kirjapaino Oy, Vaajakoski 2009

Sisällys

OIKEUSTURVA JA HALLINTO
LEGAL PROTECTION AND ADMINISTRATION

YMPÄRISTÖ JA YHTEISKUNTA
ENVIRONMENT AND SOCIETY

Erkki J. Hollo

Man, Environment and Law – Thoughts of Balance and Communication

Introductory description

Within the centennial programme of the Academy, a session was held on ”Environment and Society”. Morning topics dealt with international and methodological issues. Presentations by Professors Thilo Marauhn (University of Giessen), Timo Koivurova (Arctic Centre, University of Lapland), and Staffan Westerlund (University of Uppsala) initiated the discussions. Professor Kari Hakapää from the Law Faculty of Lapland chaired. The afternoon session, chaired by the author of this article, focussed on methodological and national topics in presentations by Professors Ari Ekroos (Helsinki University of Technology), Anne Kumpula (Turku University), Tapio Määttä (Joensuu University), Justice Kari Kuusiniemi (Supreme Administrative Court), and Doctor Leila Suvantola (Joensuu University).

One common feature was visible in the presentation. I would describe it as ”The environment – challenge for a legal society”. The author of this article tries in the following to reflect the *topoi* of this session.

Man and the environment

This paper will give some viewpoints on the dual relations between man and the environment and between environmental society and law. The idea of man as a free individual is traditionally a topic for legal argumentation. To what extent should law regulate this freedom for the sake of security and order without interfering with personal liberty of action? The environment represents another feature of freedom. Man is an essential part of and actor in legal regimes: no law exists without human beings but, on the other hand, law can only communicate in terms of human actions. Law is not able, at

least not efficiently, to dominate or command areas beyond human rights and interests. The problem is here: natural laws do not respect or communicate with man-made laws. For this reason, it is also difficult to incorporate natural and other environmental elements in legal orders unless a human interest for action exists. Another problem is that mankind has a heavy responsibility for the damaged environment and its endangered qualities. Who would be a justified addressee for duties and responsibilities in a situation where present and future generations have to ”pay” for losses to be recovered, as far as it is possible and rational? This applies both to the natural and cultural environment.

Today, the environment is understood broadly and expansively. Legally it is hard to define because it supersedes the logical and traditional sphere of human rights and legally protected interests. It is not just ”our backyard” – our interest may be to sue a neighbour for causing harm to us since he believes he has freedom of action. However, air, water, soil, forests, even cities and cultural areas are not under our domination, in our backyard. The environment includes the complete natural complexity of our globe, up to the atmosphere and down to the microorganisms of viruses and bacteria. Our civilization comprehends a multifaceted set of aspects, which are largely beyond legal capacities but which have still become components of a close to global political consciousness and readiness of action.

Rights and environmental concern

Freedom rights are both in favour of and against such a development. Since the environment is not a legal counterpart, legal actors, citizens must enter the role as stakeholders or interested parties in matters concerning the environment. The ”law” gives actors the mandate of participation in environmental issues. On the other hand, who is the ”bad guy”? That is partly a guess and the answer depends on how you put the question. If, for instance, society, the State, was the proprietor of all natural resources, one might think that it leads to public concern and responsible care. Numerous examples tell the opposite. Private ownership over natural resources is for some ideologists a *malum per se,* because such a system is supposed to lead to irresponsible exploitation of resources. Here, too, numerous examples prove the opposite. However, the only thing law can do is to communicate in terms of civil rights and interest position.

Therefore, environmental law is defined as a legal field regulating human behaviour towards the exterior world, including other people, i.e. an abstract community, not a category of holder of legal rights. Depending on the situation, the exterior world consists of varying elements. Sometimes the discussion distinguishes between the physical and social environment. If so – but this distinction can be criticised – the term ”social” largely refers to human bilateral relations and therefore is not ”environmental” in the traditional meaning. However, within environmental law, areas exist where human relations dominate more than physical features of the environment. We may take as examples traffic areas, municipal parks and recreations areas, settlement areas, and others.

Development of environmental principles

The UN Stockholm Conference on development and the environment in 1972 was the first environmentally targeted global event. The result was, as is usually the case, a political compromise but a number of environmental principles were adopted. For understanding the then established relationship between the environment, the economy, and welfare, later called ”sustainability”, two first principles are characteristic:

> Principle 1: Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.
>
> Principle 2: The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate.

This document became a guide for the further development of international environmental law in different organisations, especially in the United Nations and its sub-organisations, but also in the European Community, which at that time did not have any specific rules on the environment. The UN conference works on a bidecennial basis. The next, even more remarkable event was the Conference in Rio de Janeiro in 1992. At this occasion, two globally important conventions were adopted, namely the Climate Change Framework Convention (UNFCCC) and the Convention on Biological Di-

versity (CBD). The commitment of participant States (almost the entire globe!) to reach environmental goals especially in terms of development and climate was largely supported and pronounced. Today, the climate issue has led to different legal institutions, especially the emission trading system based on the Kyoto Protocol but also in regional and national policies on renewable energy sources.

The presently common and practised connection between the environmental sectors and the market economy is also a topic of environmental literature in different sciences. Therefore, environmental economists enjoy high popularity even as politicians. In earlier times, economic actors were rather the ”bad guys” who increased destruction of environmental values in order to earn a commercial profit, not only in capitalist but also in socialist states. This was certainly true especially during the reconstruction period after World War II. Later on, the economy and technology were bound to serve the achievement of environmental goals (Limits to Growth, Club of Rome 1972). Economic planning of measures became vital for state economies, environmental strategies, and business activities. The environment became in a way a market product. This fact is apparent, for instance, in labelling and certification systems. In the end, ”green” technology may not always be environmentally friendly or sustainable but it may offer alternatives in societies were the demand for energy sources and energy demanding products is still growing. Sustainability is an overarching welfare concept, not an ecologically oriented principle. It consists of four elements, namely the economic, the social, the ecological, and the cultural. Depending on the situation of each state, the content of conditions needed for sustainability varies considerably. Poor countries consider that they have the right to reach welfare status without environmental limitations, at least if they have to pay for investment in environmental technology or if rich countries impose restrictions on the import of their products.

Considering all these aspects, it seems clear that law-based society has changed from a property rights or private law system to a more open and public civil law system where members have an interest in common, notwithstanding the position they may have in terms of substantive formal rights. Western countries experienced a similar situation when labour law left the narrow relationship between employer and employee or when the concept of a social state led to a broad obligation to participate in the social aid system. Environmental law shows similar features. Even the concept ”environment state” is used in the literature. The ideology has many faces.

One may bring the environment into the legal system as a legal actor, claiming rights and protection against exploitation by humans. Another means that not only legally entitled persons, as owners or operators, but also societies and the public as a whole are invited to the discussion concerning environmental activities.

Setting goals for the environment with legal consequences is challenging – especially if the objective is to maintain a methodological separation of mere political arguments and legal objectives. Lawmakers should not set political goals for environmental development because that would eventually disturb the prevailing balance of legal positions. Therefore, it is in principle the task of the legislator to set legally binding objectives. He often does so but the formulation and enforcement of these objectives or strategies may be in written law with rather open wording and thus apt for interpretation of both a legal and political nature.

A rich literature exists on the methodology and supremacy of environmental law over relevant societal activities. The problem is that the tools available are often either artificial in terms of traditional hard law, while on the other hand an isolated environmental approach would leave numerous loopholes in the legal system. A mining company could claim that environmental rules are irrelevant since the company owns the land in question and the interests of neighbours seem not to be under threat of infringement. However, it is important and this is also one point of the European legal order: environmental law must cover not only the formal part of so-called environmental law (nature conservation, pollution control, and more) but it must enter all legal areas were environmental issues are at stake. These are present in labour law, food law, energy law, competition law, property law, just to mention some, not unimportant legal areas (the integration principle).

The environmental approach

Essential or ”modern” environmental law takes a different approach. A specific feature of this legal area is that it does not regulate merely relations between humans or authorities in the traditional sense, i.e. in order to protect their personal legal rights or to perform legal obligations. Environmental law goes beyond the limits of traditional legal relations in the sense that it introduces a new factor in the legal order, a factor that necessarily is not

individually contestable. Of course, environmental law has a large number of subsections where the position of an individual may vary considerably. If we take cases from building law, the environmental interest to attach people to decision-making may not be remarkable. If the matter concerns environmental pollution, it is again comprehensible that a large group of people may be concerned even in the traditional sense of legal standing.

Historically, modern environmental law originated from two legal traditions. First, it was already at the latest in the 19th century clear that human, especially industrial activities affected large areas and people within those areas. One can find rules in those times with the goal of limiting emissions and obligations to protect the rights of others. Secondly, in those times the use of natural resources also started to increase to the extent that regulations became necessary. We find even then rules on sustainable use in forestry law, fishery law, and water law. By the way, even in the classical paintings of the 19th century you find illustrations about the huge impact of human activities on the landscape and the environment in general. In connection with sustainable use of natural resources, the idea of creating protected sites for wildlife and sites also arose in the middle of the 19th century. This development led to one of the main environmental subsections: nature conservation law.

One might say that those features of historical development were not ”environmental” law. That is true in the sense that especially in the law on prevention of pollution the approach was anthropocentric. Nevertheless, even as late as 50 years ago scientific knowledge about the relations between human activities and nature, humans included, was not well developed. No reliable knowledge existed about impacts of chemicals or presently identified hazardous waste. Increasing knowledge, research, and political awareness were the reasons why the historical elementary tools were renewed and strengthened. However, administrative law had in many countries even at the end of the 19th century developed permit procedures where – based on given premises – the goal was to manage impacts of industrial activities and to find suitable sites for industrial operations. Most European countries have since then chosen to develop administrative tools towards what we call modern environmental permit and planning procedures. In other places, e.g. in the USA, developments may have been different, due to the lack of a strong state regime in their history.

In broad terms, the development of environmental law originates from national administrative and legal instruments. Differences in national sys-

tems mostly depend on general legal reasons. For instance, in some countries environmental administrative guidance communicates with the tradition of land use planning, in other states its connection refers to case-by-case decisions concerning authorisations. Numerous human interests are involved in the considerations: health, safety, economic welfare, but also parks, recreation areas, bird life. Is it possible or reasonable to expect that modern decisions would not always give priority to human interests but also give importance, whenever motivated, to living conditions of wild animals and their habitats or to conservation of watercourses, for instance, against the construction of motorways or power stations?

Recent examples prove that natural environmental values occasionally set aside hard economic interests in case of planned use of natural resources for energy. Politically, such positions occur spontaneously but no State would go too far in the sense that it would give up its role as an actor in international market competition, based on wealth. In fact, that would be against constitutional obligations of State officials and leaders. For that reason, it is not realistic to claim that here traditional law would function merely in terms of ecological laws. A built-in balance always exists on human and non-human interests. Environmental law has to consider both, because it is law, law again is resolving interest conflicts. Criticism against balancing is a matter of discourse, since legal rules are often dynamic for interpretation.

Balancing conflicts means setting limits to human freedom and human activities – at the beginning with the objective of protecting other people against health and property damage, later on also with the intention to give protection to natural processes both in major and minor contexts of ecosystems. Scientific knowledge and technical development supported by economic wealth was the foundation for legal openings.

The causation principle

In the 1960s, international efforts were taken to adopt political and legal tools in order to mitigate increasing environmental, often uncontrolled, pollution. The OECD introduced a principle, which later became one of the strongest arguments for limiting execution of property and other rights in an environmentally harmful way. This principle acquired the name of the ”polluter pays” principle, which in different languages has various versions and content. The main idea of this principle was – and still is – that natural

resources will no longer be free for use. In addition, abuse of environmental media requires reinstatement. Costs of prevention and reparation have become the burden of operators and users.

However, application of the principle did not always have the effect that the profit of companies decreased. Instead, increasing demand often led to even more production. In the case of production, the burden of covering additional (external) costs usually turned into the price paid by the final acquirer, the consumer. Thus, the cost of measures for prevention and restoration may have the effect that not the polluter but the consumer gets the bill. In terms of causation, this is not fully wrong because environmentally harmful production exists and is profitable only as long as a demand exists on the part of consumers. If consumers made other choices, harmful production would not prevail (the theory of consumers as co-polluters): the parties, who need welfare depending on natural resources, pay the additional environmental costs.

The environment has profited from use of the principle in the sense that without such a new approach environmental technology and environmental economics probably would have missed the sunrise. The OECD defined the principle later on (1975) as follows:

> ”The principle to be used for allocating costs of pollution prevention and control measures to encourage rational use of scarce environmental resources and to avoid distortions in international trade and investment.”

The European Union has adopted the same definition, for instance in Art. 174 of the Rome Treaty. The principle has been further developed and adjusted for specialized purposes and activities. In fact, ”daughter” principles arose, often with rather a sophisticated content. Not all of these principles are ”legal” or binding; rather they function as ultimate guidelines for developers and decision-makers.

It is still important to realize that maintaining environmental quality and obtaining improvement of destroyed resources is not an option for developers or the market. If an actor fails to fulfil his environmental obligations, the environmental goals must still be reached. This means that in the end the community has to enter and take responsibility. A typical example is soil pollution, which usually has a long history of activities and accidents. Often no legally liable person is found but the pollution may cause damage and risks to both the population and nature herself. The European Union requires today that Member States take responsibility

for investigating polluted areas and whenever required bear the costs of reinstatement.

As long as no limit exists for the load of emissions caused by production, even higher prices would not guarantee a sustainable environment because demand has no limits. Therefore, it is necessary – in addition to the causation principle – to set independent values for how far polluting activities can go or the use of resources expand without endangering sustainability worldwide. Air pollution is here a good example. Certain industrial chemicals and gases are deteriorating the air and the atmosphere to the extent that the ecological balance of the Earth may suffer. For this reason, certain substances are banned in industrial production. CFC compounds (Freon, aerosols) were useful for the production of equipment, especially refrigerators, but research proved later on that these could severely damage the ozone layer. The international ban of such substances led to a need for innovation of replacements which, so far, are perhaps less efficient but necessary for some parts of welfare worldwide. Asbestos and DDT are other examples of historically ”great” inventions which later on were discovered to have tremendously harmful effects on both human health and nature.

Material examples are numerous. In the legislation concerning air pollution, health concerns have already for a long time dictated the content of administrative guidance and sanctioning. The same is true of water pollution. Mining law is another example. In terms of traditional legal thinking and conceptualization, environmental law brings something new to existing rules. In other cases, it may be necessary to adopt new, more efficient instruments. These instruments may be both legal and economic. This occurs especially in the areas of management of climate change or in the regulatory field of biotechnology. Environmental law tends to cross borders since geographic and climatic conditions often have a regional or even global character. This means that in order to resolve or to handle environmental needs, setting of goals or objectives for regulation becomes vital. This is in fact typical of modern environmental law compared to its historical roots: national and supranational regimes are looking for common legislative goals. In harmonized strategies and conceptual context, each legal order tries to find appropriate tools for the transposition of the applicable goals.

Balancing rights and public interests

The problem with traditional property rights and obligations is that they enjoy protection under the legal order and mostly deal with horizontal relations, between neighbours or individuals and authorities. The limits for competences of holders of property rights in relation to vertical, i.e. societal and broadly environmental, needs are therefore rather open for political interpretations, if not defined by the legislation itself. In order to avoid pure political argumentation it is important to understand how legal institutions and concepts are practised in a dynamic set of environmental rules. It seems that a need exists to redefine the functions of those institutions and concepts. A classic example is any property right taken under the ”integrated” view of environmental law. A trend exists to adjust the function of those rights in the context of environmental law. Any traditional legal concept or right, e.g. ownership, building rights, even immaterial rights and financial instruments are under pressure from environmental policy. One problematic result is that the legal order or the legislator does not give a clear answer to what extent traditional institutions and rights, often protected under the Constitution, should be opened and re-evaluated for environmental purposes, for instance under the aspect of ”sustainability”, a new term adopted in the 1980s.

Public participation means that all information about the environment and relevant activities is open for everyone and that anybody is entitled to give an opinion in any procedure dealing with the environment where they live or work. This openness is reality in most Western countries and it often means a challenge to public authorities in fulfilling all requirements of publicity or inquiries and to operators who may have to wait longer for permit decisions due to increasing rights of appeal and access to justice. The European Union and the United States are forerunners in this direction (e.g., environmental impact assessment, public participation, and human rights to the environment, all having the Constitution as a safeguard). Still, participation has different motives, which may be environmentally both friendly and harmful. Everyone may want to support a new motorway but since no one wants to have it in their own backyard it must be placed in the open nature where the ecological damage is usually more visible than in urban surroundings.

The environment is not the first area of law where we find the issue of vertical protection of property rights. We know the constitutional term of

social limits of ownership, which originated in the national need to protect safety and health. By definition, no private right would entitle its holder to endanger state security or public health. This argumentation was even logical because on the one hand, it was the state that had granted those rights and given them protection, and on the other hand, it was natural that the state in a similar manner could protect its vital interests against abuse even of protected rights. Consequently, no modern or ethical constitution gives protection to ownership or other property rights if use of those rights conflicts with vital state or other public interests. National differences exist in the view to what extent environmental interests should be classified in that sense as ”vital”.

In this respect some legally interesting questions arise. First, does this vertical dimension of limitations of rights also imply an obligation actively to protect those public needs and interests?

As far as the first question is concerned, some constitutions have adopted a two-sided mode of regulation. One is not only obliged to respect different kinds of public needs of a general nature but is also responsible for maintaining an acceptable state of conditions if needs so require. This rule could imply for instance, using waste and health law as examples, that the possessor of a property would – based on his title over a resource – have to take measures for instance to remove substances which earlier possessors or bypassing actors have dumped there. Similarly, the holder of land would have to take care of existing natural or cultural values without compensation. Such a responsibility for continuously keeping a property in a safe and proper condition for the sake of public interests may be exceptional but still seems realistic. The second question focuses, not on the active duty of care, but on the limits of constitutional limitations in favour of environmental interests.

It seems obvious that many parts of modern environmental law are covered by the principle that protection of property rights has certain limitations concerning public safety and health. These limitations are ”natural” in the respect that society has no duty to compensate, which would be the case if those limitations fulfil the level of compulsory taking or expropriation. On this basis, it is a rather common position that legal prohibitions on polluting the environment, be it air, soil, or water are in line with the constitutional social limits of ownership.

The ground for limitations is today often not national but originates from EC Community law or international environmental conventions. Would it

then be acceptable that the commitments which states have adopted, for instance on protection of sites and habitats, were transferred to holders of land without compensation? Those obligations often fall in categories of protection of biodiversity, protection of habitats and natural landscapes, or management of climate change (reduction of greenhouse gases). Often, these values in question are found in nature randomly after a scientific investigation or political strategy, and it may be close to impossible for a holder of land to foresee what kinds of limitations these supranational obligations of a State may cause. Often, too, the result is that authorisation for a permit will be refused, which again may result in loss of property values. Should such a loss be treated as a mode of compulsory taking or would it rather be a free obligation of those who happen to own the property at the time when the limitation occurs? Many constitutions do not have a clear position on this category of limitations. Finland has adopted an intermediate but still not clear standing by granting compensation under certain conditions of equity.

The Finnish constitutional order

Finland adopted a constitutional reform in 2000. The previous Constitution of 1919 had already been partly amended earlier. The present Constitution does not bring important changes in the system of constitutional rights or the rules of the parliamentary order. Instead, the task has been to give the Constitution a more integrated function within the entire legal system because Finland has no explicit body or constitutional court to control implementation of constitutional provisions. Courts, especially the two Supreme Courts, are supposed to apply constitutional provisions whenever these are at stake in a matter of appeal. Sometimes this may lead to a modified interpretation of general legislation or previous practices. Another sector where constitutional reform has brought changes is the separation of powers between the Government and the President of the Republic, the latter of which to some extent has lost previous competences to the Government.

Sources of law are legislative acts, legal practice, or jurisprudence and, to some extent, customary law and legal principles. Other legal materials such as official statements (*travaux préparatoires*) and valid doctrine (*herrschende Lehre*) may influence legal decision-making. Written law is decisive and consists of the Constitution (2000) itself, further constitutional

acts, and common legislation of the Parliament. As a rule, courts cannot overrule legislation in force. However, since the Constitution has a certain direct effect, constitutional provisions, especially those concerning basic rights, may give courts the power, case by case, to modify legislative practices if these are considered to be in conflict with the Constitution. Thus, constitutional provisions may directly influence or modify the application of existing laws if they are not in accordance with the Constitution. However, the courts do not in principle act as ”legislators” when needed legislation does not exist at all, because, in principle, interpretations obviously *contra legem* should not be taken by courts or other authorities.

As far as civil rights are concerned, the basic property right, the freedom of trade and the provision called civil environmental are in this context worthwhile mentioning. In addition, human rights are guaranteed by the Constitution. The human rights aspect has indeed also laid some importance for property law as well as environmental law in the light of international conventions. Essentially, the role of these constitutional provisions is to authorize and to oblige the Parliament to enact appropriate (general) legislation for implementation of the provisions. It is hence a kind of a self-commitment of the legislator to act. A further constitutional provision to mention is the environmental basic right (Constitution sec. 20). This rule provides for a general liability of everyone to assume liability for environmental damage; on the other hand, it stipulates for the public involved a right to participate in environmental decision-making; this includes for instance land-use planning.

A distinction is made between public objects and public property (*res communes omnium*), which describes a situation where (usually immovable) property is not owned by anybody. One example in international law is the open sea; another is the atmosphere or the air. In Finnish law, this concept has lost its importance. Previously, water and forest areas existed the owners of which were not determined and the areas were therefore open for everybody. In the 19th century, it was still possible for a pioneer settler to occupy forest areas (appointed by the State) and to receive a title of ownership based on occupancy. Nowadays this is not possible because all inhabited forests and waters beyond the limits of registered habitation areas are distributed to specific owners, in most cases to the State. The State is also the formal owner of Finnish territorial waters and the open middle parts of large lakes. These waters are public water areas (Act 204/1966). In the forest sector, the northern part of inhabited Finland in Lapland is qualified as a

”Desert Area” which is mostly owned by the State (Act 62/1991). All national parks and natural parks are also property of the State (Nature Conservation Act 1096/1996).

Human rights and the environment

Human rights are one feature of environmental constitutional law. The general view is that human rights are in line with the objectives of environmental law. Participation in connection with execution of individual rights is supposed to strengthen the position of environmental decision-making. Some remarks on this point are apposite. First, human rights have a strong tradition in anthropocentric thinking: ”human versus human” or ”human versus the State”. Human rights theory is closely related to ethics but it has strong political aspects such as e.g. the claim for equality, for social participation as well as social acceptance and cultural integrity. The reference for these claims originates from the atmosphere of tolerance in both national and supranational contexts. It is also important to remember that constitutional basic rights of different people or groups, when applied in the same situation, may be controversial and that balancing is required (property or liberty rights against human rights to access nature or environmental quality).

Considerations on human rights might have importance for environmental conditions in case of minority peoples and natural livelihood. People (or peoples) that traditionally obtain their living from nature may claim to have a human right to use natural resources. Protection of those rights may conflict with ecological sustainability. On the other hand, local users often have, for practical reasons, a traditional knowledge how to use natural resources economically without causing unnecessary destruction or damage. Free passage in natural areas – and cultural sites – is sometimes classified as a public ”right” (*usus publicus*). Again, a conflict may occur between tourism in nature and ecological sustainability. The same applies to traffic as well. It seems that in such situations the human rights argument to some extent fails its goal.

Background literature

Birnie, Pat – Boyle, Alan: International Law and the Environment. Second Edition. Oxford University Press: Oxford 2002.

Hollo, Erkki J.: Property and Trust Law / Finland. Kluwer International Encyclopædia of Laws IEL 2008.

Koivurova, Timo: Environmental Impact Assessment in the Arctic: A Study of International Legal Norms. Ashgate Publishing: Aldershot 2002.

Krämer, Ludwig: EC Environmental Law. Fourth Edition. Sweet & Maxwell: London 2000.

Kuokkanen, Tuomas: International Law and the Environment. Variations of a Theme. Kluwer Law International: The Hague 2002.

OECD: The Polluter Pays Principle. Paris 1972.

The Limits to Growth. A Report to the Club of Rome by Donella H. Meadows, Dennis l. Meadows, Jorgen Randers, William W. Behrens III. Universe Books: New York 1972.

Vihervuori, Pekka: Environmental Law / Finland. Kluwer International Encyclopædia of Laws IEL 2008.