The meeting in Copenhagen in December exposed clearly the political conflicts embedded in the climate change issue. The EU target before the meeting was to limit the raise of temperature in the atmosphere to two degrees Celsius compared to preindustrial level. However, EU could not reach a broad international consensus among the industrial states of the world to reduce emissions of greenhouse gases with 30% by 2020, based upon 1990 emission level. The meeting also failed to set the target for the contribution from developing states. The need for continuous political negotiations and meetings is obvious. It is necessary to reach an agreement with clear, legally binding obligations for the individual states. Still, even with a two degrees raise, the risk remains for significantly changed conditions in the biosphere in terms of e.g. flooding over large land areas. We observe already today a decrease of the Arctic ice cover. We are in climate change. It is no longer a matter of only changing the course but also to adapt. Some are doing it by planning for further extraction of carbon rich oil and gas resources where the melting ice invites them to.

The Baltic is an inland sea with sensitive water ecology. Substantive inflows of fresh salt water from the North Sea enter only occasionally through the narrow passages in the Belts and Öresund. The exchange of water is further counteracted by the halocline barrier between the surface and depth water layers, leading, all in all, to shortage of oxygen in the depths of the sea. Moreover, the Baltic brackish water ecosystem hosts relatively few species; many of those living on the brink of their geographical or ecological extension area. Due to these natural conditions, the resilience to further impacts is low. Nevertheless, 85 million people live in the large Baltic Sea catchment area, in industrialised states with an average high consumption per capita of energy and natural resources and with numerous industries, forestry, agricultures etc. Pollutants of different kinds are continuously introduced into the sea. Huge emissions of nutrients cause algal blooms and eventually oxygen absence and death in the sea bottoms.

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The climate change and the conditions in the Baltic are results of unsustainable development. Overfishing and loss of biodiversity are other examples. Despite the Brundtland report 1987 and the global conferences on the environment in Rio 1992 and Johannesburg 2002, we are still not utilizing natural resources and protecting air, water and land in a way that meets that the needs for future generations. Turning from unsustainable to sustainable development in a world with strongly increasing population, necessitates technical development and very tough political decisions but also efficient policy implementation. The role of law is in this context crucial; on international, EU and national level.

This is the situation at the time when the first issue of Nordic Environmental Law Journal is published. It is also a reality to which environmental law research must relate. Different tasks are ahead.

We need to investigate if our existing legal techniques are efficient for implementation of environmental policies and to look for other solutions. Studying foreign legal systems can be useful in order to find and develop new legal solutions to be used. This task includes also how to adapt the law to new sustainable technology and new forms of land use, for extraction of renewable energy resources, for separation and storing of CO₂ etc.

It is necessary to approach the legal system for decision making, including the role of different courts and authorities. Can we continue to decentralise legal powers in planning, licensing and control when urgent national and international objectives shall be implemented, such as protection of biodiversity and transformation of land use to promote extraction of wind and other renewable energy resources?

Environmental law research should observe and cooperate with other sciences related to policy making and implementation, e.g. economics, political science and system theory. There is also an obvious connection between law and ecology. A development is not sustainable if the law admits forestry, hunting, hydropower development, industries and other activities to be performed in a way that threatens ecosystems on which human and other life depend; such development is self-destructive. Linking law with ecology is crucial and also difficult. The researcher must explain how law should be constructed to meet non linear effects, complexity and uncertainties in nature.

Sustainable development is not only dependant on the potential in specific legislation aiming at environmental protection. Research must involve a
great number of other statutes related to the use of land and natural resources, statutes partly based upon other objectives than to protect ecosystems, e.g. the legislation on mining, forestry and development of infrastructure. Actually, sustainable development calls for the entire legal system not to counteract it.

But this is not sufficient. Law is conserving the past, let me illustrate with one example. Environmental air quality standards, aiming to protect human health, are exceeded in parts of Stockholm. Still, a breathing citizen has no legal means to challenge a licensed polluting industry in the area; she is formally prevented from appealing a decision by a supervising authority to do nothing, and at the same time locked out from filing a private law suit in court. The Swedish Environmental Code (aiming at “sustainable development”) denies her to ascertain environmental rights to which she is entitled according to EC law and the Aarhus convention. The reason is partly historical. The Swedish Environmental Code is based upon traditional “concession law” from the 1940’s, protecting the polluters position.

Many legal constructions and principles of today derive from a time when sustainability was not an issue. They are deeply rooted in our legal systems and apply generally, e.g. the principles of e.g. legal certainty and proportionality. So is the concept of private ownership to land and natural resources. The EU Commission has adopted a decision to halt the loss of biodiversity within the union from 2010 and beyond. The decision recognizes biodiversity as a precondition for sustainable development. However, implementing the objective in most or all of the member states clashes inevitably with property rights. Forest land includes a great deal of Sweden’s biodiversity, but Swedish law does not prevent the forestry from destroying most of it. This is basically due to the constitutional protection of ownership, in combination with insufficient state resources to compensate land owners if habitats and ecosystems are set aside, for the needs of future generations. Traditional legal principles and concepts should not be washed out but they must be discussed, reconsidered and complemented if they establish obstacles to sustainable development. This is part of a systematic approach.

It is sometimes stressed in the political debate that the giant step to a sustainable development opens for radically new thinking in technology and economy. We are facing similar challenges for jurisprudence. If ecological sustainability is a precondition for economic and social life governed by law, then legal theory and methodology must start out from
the same presumption. If legal theory and methodology needs to be improved to cope with sustainability, this is a task for environmental law research.

Enormous efforts are needed to mitigate and, more or (hopefully) less, adapt to some climate change, to avoid a future ecological collapse in the Baltic and instead provide for sustainable fishery and other ecosystem services in the sea. A revised legal system should not only aim at sustainable development, it must also include a system of different instruments ensuring implementation of the objective. Such a complex construction cannot be performed without a legal theory based upon sustainable development.

It is indeed time for a Nordic journal in environmental law, for analyses and discussions of the role of law in connection with implementation of different environmental objectives. Independent academic legal writing fulfils here a complementary and reviewing role besides the politically connected law making institutions.

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