Innehåll/Content

Gabriel Michanek: Introduction … 1

Nicholas de Sadeleer: State Aids and Environmental Protection: Time for Promoting the Polluter-Pays Principle … 3

Suvi Borgström: Helping Biodiversity Adapt to Climate Change – Implications for Nature Conservation Law in Finland … 31

Robert Utter: Climate Change Liability – Variations on Themes Across the Atlantic … 43
Introduction

Gabriel Michanek, editor

Professor emeritus Staffan Westerlund, Faculty of Law, Uppsala University, passed away 22 March 2012, at the age of 70. He was the pioneer that developed environmental law as a discipline in Sweden. He was also one of the scholars who, in the 1990s, initiated the fruitful Nordic cooperation in environmental law research. Staffan Westerlund’s academic output was extensive. He advocated strongly for a proactive legal research approach that departs from narrow analyses of valid law and instead focuses on the development of new legal constructions based upon ecological sustainability. Staffan Westerlund was honored at the conference Rule of Law for Nature in Oslo 9–11 May 2012. We miss a colleague, a sincere environmentalist and a good friend.

The sixth issue of the Nordic Environmental Law Journal includes three articles. The first is written by Nicholas de Sadeleer: State Aids and Environmental Protection: Time for Promoting the Polluter–Pays Principle. State aids are sometimes legally accepted for environmental protection purposes, despite Article 107 TFEU that, as a principal rule, prohibits State aids. However, State aids may impact environmental policies both positively and negatively. State aids may even counteract the polluter pays principle set out in Article 192(2) TFEU.

The second article is written by Suvi Borgström: Helping Biodiversity Adapt to Climate Change – Implications for Nature Conservation Law in Finland. Various measures are needed to assist species and habitats in adapting to climate change, including e.g. protecting and restoring large robust natural areas, ensuring connectivity between those areas, increasing the resilience of species and ecosystems to changing conditions, and in some cases undertaking active translocation of populations to climatically more suitable areas. The Habitats Directive provides a legal basis for such measures. This article analyses how Finland has implemented the relevant provisions of the Habitats Directive.

The third article is by Robert Utter: Climate Change Liability – Variations on Themes Across the Atlantic. The author takes as his point of departure two important rulings by the US Supreme Court; Massachusetts v. EPA and AEP v. Connecticut. According to these rulings, greenhouse gas emissions are covered by the Clean Air
Act and thus fall under the regulatory jurisdiction of the Environmental Protection Agency. This in effect cancels the possibility for private enforcement of emission limits on greenhouse gases under federal nuisance law. The legal situation in Finland is not the same as in US, but due to e.g. burden of proof and requirements on causality, Finnish nuisance and tort law are far from being effective by means of enforcement or redress in the context of climate change liability.
Abstract
The prohibition of State aids under Article 107 TFEU did not prevent the Commission to develop its own vision of a well-tailored State aid policy regarding the protection of the environment. However, granting of State aids to undertakings is likely to impinge both positively and negatively on environmental policies. Moreover, State aids are not only distorting competition, but they may also run counter the polluter pays principle enshrined in Article 192(2) TFEU. It is the aim of this article to explore some of the key issues arising in the implementation of Treaty provisions and secondary law. Particular attention is drawn to the allocation of emission allowances free of charge and to tax exemption regimes.

1. Introductory remarks
Although they still occupy a marginal place, State aids in the environmental domain nonetheless constitute one of the spearheads of national environmental protection policies and of the fight against global warming, as is shown by the diverse nature of the initiatives taken in this area. First, given the costs of the investments borne by the private sector in order to comply with environmental regulations, the public authorities are inclined to give financial assistance to their undertakings. The EU lawmaker may even authorise the granting of such aids in order to compensate for costs incurred by the implementation of harmonised standards. Second, State aids can also be granted with a view to encouraging undertakings at the forefront of technological innovation in pollution abatement. Since there is no let-up in the expansion of environmental policy into new areas, such as renewable energy and eco-products, State aids have become more widespread. Containing both ‘positive’ (subsidies, loans, direct investments, etc.) and ‘negative’ (tax relief, preferential tariffs, tax remission, exemption from the obligation to pay fines or other pecuniary penalties, guarantees, etc.) measures, they may come in extremely varied forms. This complex and evolving situation inevitably calls for a nuanced approach.

Whilst State aids appear to be a not insignificant asset for ensuring the success of a public environmental protection policy, a number of subsidies are also likely to hamper the environ-

---

1 I am greatly indebted to the law faculty of Lund that has been offering me invaluable working conditions when I carried out my research on State aids. I also owed much gratitude to my colleague Annika Nilsson who has been helping me to organise my visits to Lund University. Last, the author wishes to express his gratitude to Mr. Th. Roberts.

* Professor of EU law, Saint Louis University. Jean Monnet Chair Holder. Guest Professor at Lund and at UCL. www.desadeleer.eu

2 The EU lawmaker may authorize Member States to grant State aids with the aim of compensating costs incurred from environmental obligations. For instance, in virtue of Article 10a(6) of ETS Directive 2003/87/EC, Member States may adopt financial measures in favour of sectors determined to be exposed to a significant risk of carbon leakage due to costs relating to greenhouse gas emissions passed on in electricity prices, in order to compensate for those costs. Such financial measures have to be granted in accordance with State aids rules.

3 Case C-126/01 GEMO [2003] ECR I-4397, para. 28.
mental policy. In this connection, a few examples will suffice. Typical in this respect is the Common Fisheries Policy (CFP). The basic condition for the success of its reform is the reduction of overcapacity in fishing fleets which is still supported by subsidies. Needless to say that these overcapacities create economic pressure to set fishing quotas at levels which are too high from an ecological point of view and lead to illegal fishing activities. Another case in point is the over-allocation of emissions allowances. In 2006, Member States over-allocated the green house gases (GHG) allowances free of charge to a number of major polluters. On one hand, this led to a collapse of the price of these allowances and imperilled the whole trading scheme; on the other, the windfalls profits caused significant distortions of competition.

Be that as it may, some of these State aids may benefit national undertakings to the detriment of their competitors and, for this reason, undermine the system of free and non distorted competition required in particular under Article 107 TFEU. They may also sit awkwardly alongside the polluter pays principle, enshrined in Article 192(2) TFEU, which requires polluting undertakings to bear the costs of their pollution reduction investments.

In order for an environmental measure to be considered to breach Article 107 TFEU, it is necessary to provide evidence, first, that it amounts to a State aid as defined by this provision, and which does not fall under any of the exceptions listed in paragraphs 2 and 3. One is struck by the great legal uncertainty which still reigns regarding both the concept of State aids as well as the issue of their compatibility with the provisions of the Treaty.

The first section of this article is dedicated to substantives rules whilst the second deals briefly with procedural rules. Since this study will be limited to a commentary on the different arrangements for environmentally friendly aids, the general rules will not be analysed. For these issues, readers are invited to consult the more general studies dedicated to controls over State aids.

Finally, where it is necessary to control the conduct of States and not those of undertakings, the decentralisation of powers from the Commission towards the national authorities is more difficult to assure than it is when implementing Articles 101–102 TFEU.

---

5 Due to this over-allocation, the price of the allowances fell in a month from almost 30 Euros to 12 Euros. E.g. J. de Sepibus, ‘Scarcity and Allocation of Allowances in the EU Emissions Trading Scheme – A Legal Analysis’ 32 (2007) NCCR Trade Working Paper, 36.
8 Although the former Article 81 EC (Article 101 TFEU) has been subject to a centralised control regime since 1962, the difficulties and costs of these entailed by these
2. Substantive conditions

2.1 Introductory remarks

Before deciding on the compatibility of aid with Treaty State aid provisions, the Commission has to clarify if State aid is involved. Given that the definition of a State aid is by no means straightforward, this is a rather challenging task. In fact, Article 107 TFEU does not provide any definition of the concept of a State aid. Moreover, the measures falling under this provision are not identified with reference to their form, their objectives or the activities to which they apply. According to settled case law, in order to be classified as a State aid, a measure must satisfy four conditions. For the sake of clarity, the prerequisites set out by the Court of Justice are examined in a slightly different order:

- an advantage must be conferred on the recipient of the aid measure;
- the advantage must be of state origin;
- the aid must have a selective nature;
- and finally, the aid must be liable to affect trade between the Member States.

These different conditions often end up becoming entangled with one another, which stresses the evolutionary and pragmatic nature of the concept of a State aid. On the one hand, the EU courts are careful to ensure that the concept of State aid is sufficiently broad, whilst on the other hand they also seek to constrain it out of legal certainty concerns.

2.2 First condition: advantage conferred on the recipient

2.2.1 Introductory comments

First, the recipients of State aids must be undertakings and not private persons. Accordingly, a tax relief granted to private persons purchasing automotive vehicles equipped with catalytic exhaust pipes would not fall within the ambit of Article 107 TFEU.

Second, in order to amount to a State aid, the measure must create an advantage for its beneficiary. It is thus necessary to establish ‘whether the recipient undertaking receives an economic advantage which it would not have obtained under normal market conditions’. Against this background, the notion of advantage has been very broadly interpreted. It is wider than that of subsidy. Accordingly, any measure which, in different forms, reduces the burdens that normally apply to a company budget amounts to an advantage for the purposes of Article 107(1) TFEU.

---


10 E. Garbitz and V. Zacker, ‘Scope for Action by the EC Member States for the Improvement of Environmental Protection under EEC Law: the Example of Environmental Taxes and Subsidies’ (1989) CML Rev. 429. The Commission, for its part, intervening according to ancient Article 88 EC (Article 108 TFEU), carried out a searched analysis of the German and Dutch fiscal exemptions for ‘clean’ cars. It finally raised no objection against the implementation of those measures. See 15th Annual Report on Competition Policy, nb. 224 and 225. The question arose as to whether an environmental tax exemption on international flight granted to the transfer passengers using Schipol airport and not to other passengers using Dutch airports was deemed to be a State aid granted to that specific airport. The Dutch Supreme Court doubted whether the advantage granted to transit passengers could also lead to a factual advantage for the airlines or Schipol airport. See HR, 4 October 2009, LJN BI3451.

On the other hand, the granting of relief from abnormal burdens relating to the provision of a service of general economic interest pursuant to Article 106 TFEU does not create an advantage for the recipient undertaking, since the compensation does not exceed the real cost of the service including a reasonable profit.\(^{12}\) By way of illustration, ‘the consideration for the services performed by the collection of disposal undertakings’ does not constitute a State aid, which means that a levy on the sale of certain goods, the revenue from which is used to indemnify undertakings collecting and/or recycling waste oils, cannot be regarded as financing a State aid.\(^{13}\)

The following measures have been qualified as State aid within the meaning of Article 107 TFEU:

- The selling of a plot of land to a private undertaking by a public undertaking, when the purchase price would not have been obtained by the buyer under normal market conditions.\(^{14}\)
- The tendering for a contract aiming at increasing the capacities of newspaper waste recycling plant that has for effect of conferring an advantage on the bidder, on the account that the authorities are not intervening as private investors.\(^{15}\)

2.2.2 Undertakings’ liability to bear the environmental costs

As far as environmental measures are concerned, in order to ascertain whether a recipient undertaking receives an advantage, the Commission takes into consideration the polluter pays principle, which makes it possible to assess liability for the costs generated by the pollution concerned. Following the Commission’s reasoning, in Gemo, a case regarding the financing by slaughterhouses of operators collecting and disposing of animal carcasses and slaughterhouse waste, Advocate General Jacobs took the view that ‘a given measure will constitute State aid where it relieves those liable under the polluter-pays principle from their primary responsibility to bear the costs’.\(^{16}\)

Without referring to this environmental principle, the Court of Justice ruled, that the disposal of such waste had to be ‘considered to be an inherent cost of the economic activities of farmers and slaughterhouses’.\(^{17}\) As a result, an advantage was granted to these undertakings.

Furthermore, the granting of exemptions from certain regulatory obligations or their financing may for this reason fall within the ambit of Article 107 TFEU. Accordingly, the Commission has concluded in various cases that by financing costs which would normally fall on the recipient undertaking, the public authorities have granted it a State aid. For example, where the authorities decide to finance the elimination of industrial dust emitted by an undertaking, they are granting

---

\(^{12}\) Compensation granted to undertakings entrusted with the operation of SGEI are falling outside the scope of Article 107 TFEU on the grounds that such compensation does not represent an advantage. However, four conditions must be fulfilled. See Case C-280/00 Altmark [2002] ECR I-7747, paras. 89-93.

\(^{13}\) Case 240/83 Association de défense des brûleurs d’huiles usagées [1985] ECR I-531, para. 18. As regard the compensation approach, see opinion AG Jacobs in Case C-126/01 GEMO [2003], seen above, para. 97 and following.


\(^{16}\) Opinion AG Jacobs in Case C-126/01 GEMO [2003], above, para. 69.

\(^{17}\) Case C-126/01 GEMO [2003], seen above, para. 31. AG Jacobs had considered that ‘the provision free of charge of a collection and disposal service for dangerous animal waste [was relieving the] … farmers and slaughterhouses of an economic burden which would normally, in accordance with the polluter-pays principle, have to be borne by those undertakings’. See Opinion AG Jacobs in Case C-126/01 GEMO [2003], above, para. 64.)
Nicolas de Sadeleer: State Aids and Environmental Protection: 
Time for Promoting the Polluter-Pays Principle

it an aid because this decision has the effect of 
exempting the undertaking concerned from the 
costs relating to the elimination of its waste.\textsuperscript{18} In 
fact, under the terms of the polluter pays prin-
ciple, the producer of the waste is responsible for 
its disposal and recycling. The intervention by 
a public authority in favour of an undertaking 
will in this case be tantamount to an economic 
advantage for the latter and, accordingly, must 
be classified as a State aid within the meaning of 
Article 107 TFEU. Similarly, a steel producer can-
not be released from its obligation to manage its 
and to recycle industrial dust.\textsuperscript{19}

2.2.3 Granting of tradable emission rights

Last, the question arises as to whether the grant-
ing of tradable emission rights entails an advan-
tage. Account must be made of the fact that some 
emission rights are granted for free (grandfa-
thering) whereas others are sold or auctioned. 
An egregious example would be the European 
Trading Scheme (ETS). During the two first 
phases (2005–2007 and 2008–2012), ETS Direc-
tive 2003/87/EC\textsuperscript{20} allowed the Member States to 
auction off a limited amount of allowances (5 to 10 
\textpercnt). As a result, 90 to 95 \textpercnt of the allowances were 
granted free of charge.\textsuperscript{21} Although allowances to 
emit GHG will be auctioned from 2013,\textsuperscript{22} the ETS 
Directive 2003/87/EC still provides for derogations.\textsuperscript{23} Where these commodities are granted 
for free, sold or auctioned, the undertakings can 
trade during a specific period in intangible assets 
representing a market value. It follows that the 
undertakings enjoy the advantage of being able to 
monetise the economic value of the allowance. 
Admittedly, there is increasingly support for the 
view that where the distribution of these allow-
ances involves grandfathering or where there 
are sold by State authorities below market price, 
there is an advantage for the recipient undertak-
ing: ‘the advantage flows essentially from the fact 
that the state has handed out for free something 
that is tradable’.\textsuperscript{24} In its 2008 guidelines discussed 
below, the Commission is taking the view that 
‘tradable permit schemes may involve State aid in 
various ways, for example, when Member States 
grant permits and allowances below their market 
value and this is imputable to Member States’.\textsuperscript{25}

In this respect the Dutch NOx trading 
scheme is a good case in point.\textsuperscript{26} In the frame-
work of the NOx national emission ceiling es-
tablished by Directive 2011/81, the Netherlands 
set a cap-and-trade scheme for 250 of its largest 
and most polluting facilities. According to this 
scheme, these undertakings had to comply with

\textsuperscript{18} Commission Decision 1999/227/ECSC of 29 July 1998 
on aid granted by the Land of Lower Saxony (Germany) 
\textsuperscript{19} Ibid.
\textsuperscript{20} Directive 2003/87/EC establishing a scheme for greenhouse 
gas emission allowance trading within the Community, OJ 2003 L 273, 32.
\textsuperscript{21} However, the Commission did not request formal no-
tification of the National Allocation Plans (NAP) as State 
aids under Article 108(3) TFEU. In assessing the validity of 
the plans under Directive 2003/87/EC, the Commission 
reminded the applicant Member States that it was not 
excluded that their NAPs were implying State aid. See 
the letter of the Commission of 17 March 2004 quoted in 
Case T-387/04 EnBW Energie Baden-Württemberg AG 
[2007] ECR II-1201. See also Commission Decision on the 
first French NAP C(2004) 3982/7 final, Decision on the 
first Polish NAP C(2005) 549 final. It must be noted that 
the Commission has never opened a formal State aid in-
vestigation.
\textsuperscript{23} Pursuant to Article 10c(1) of the Directive, certain 
Member States are allowed to grant to installations for 
electricity production allowances free of charge until 
2020. See Communication from the Commission – Guid-
ance document on the optional application of Article 10c 
\textsuperscript{24} Jans and Vedder, European Environmental Law, 4th ed. 
\textsuperscript{25} Paras. 35 and 139. See also, European Commission, 
Guidelines on Certain State Aid Measures in the context 
of greenhouse gas emission allowance trading scheme 
\textsuperscript{26} Case C-279/08 P Commission v Netherlands [2011] nyr.
a specific emission abatement standard either by reducing its own emissions either by purchasing emission allowances from other undertakings. In case an undertaking exceeded the national emission standard, it was required to compensate for the surplus the following year. In other words, the national scheme authorised the undertakings to trade between themselves in emission allowances. In contrast with other national schemes, the quantity of tradable allowances was not laid in advance on the grounds that they were awarded according to the additional reduction the undertakings could achieve in relation to the national standard. In an infringement proceeding brought by the Commission against Netherlands, the question arose as to whether the tradability of the emission allowances constituted an advantage for the undertakings subject to the scheme.

Taking the view that the national authorities were conferring on these tradable allowances a market value, both the General Court and the Court of Justice held that the measure had to be regarded as ‘an economic advantage which the recipient undertaking could not have obtained under normal market conditions’. The argument that the allowances were mitigating the efforts undertaken by the undertakings to attain the national emission standard was rejected on the grounds that ‘the costs of reducing those emissions fall within the charges to which the budget of the undertaking is normally subject’.

As a matter of fact, the mere existence of windfall profits militate against the negation of any economic advantage conferred on the recipient undertaking.

2.3 Second condition: State resources

2.3.1 Introductory comments

For to be classified as a State aid within the meaning of Article 107 TFEU, the advantage must, first, be granted ‘directly or indirectly through state resources and, second, be imputable to the State’. These conditions are cumulative. Accordingly, the concept of ‘aid’ is defined in particularly broad terms in that it applies to all forms of assistance granted by a Member State or through State resources in any form whatsoever. By way of illustration, the following measures have been considered to involve the transfer of public resources and, accordingly, to fall within the ambit of Article 107 TFEU:

- the levy applied in order to finance the operations of a national manure bank on Dutch pig breeders which produced more manure than they could use;  
- the management of animal waste provided free of charge by private undertakings for farmers and slaughterhouses, as ‘the organisation of that service originates with the public authorities’.

Moreover, the distinction made between ‘aid granted by Member State’ and aid granted ‘through State resources’ does signify that State aids may be granted by all levels of government, as well as public and private bodies in which the Member State exercises a decisive influence. As far as environmental policy is concerned, measures taken by local authorities as well as environ-

---

mental agencies are caught by article 107 TFEU inasmuch they concern public resources.

This condition is not always fulfilled. For instance, subsidies awarded to an undertaking with a view to covering the costs incurred by the clean-up of contaminated soils does not involve a transfer of State resource, inasmuch as the undertaking is bound to reimburse the sum to the State. By the same token, the obligation to pay a charge for each car that is registered for the first time in the Netherlands in order to finance a private undertaking in charge of collecting and recycling car wrecks and founded by a voluntary agreement between undertakings that was rendered compulsory by the Netherland public authorities, does not involve a transfer of public resources. First, it is a legal obligation, and, second, the payment of the charge is voluntary because manufacturers and importers may obtain exemption if they ensure themselves the recycling of the car wrecks. Given that only private undertakings were involved in the scheme, the benefits were not granted out state resources. Conversely, when they favour some recycling undertakings, the charges paid by commercial undertakings relating to their vehicles may be considered as state resources and, thus, State aids.

2.3.2 Emission trading scheme and transfer of State resources

Much ink has been spilled over the question as to whether the gratuitous allocation of allowances is tantamount to a transfer of State resources.

As a starting point for analysis of this challenging question it must be stressed that the measure must be imputable to the Member State. The fact that an EU act, such as the ETS Directive, was obliging Member States to allocate GHG emission allowances free of charge did not prevent the allocation from being qualified a State aid inasmuch as the national authority was endowed with sufficient room for manoeuvre. Given that the ETS directive offered the national authorities much discretion during the two first phases of the scheme (2005–2008, 2008–2012), this condition was easily fulfilled.

Secondly, the advantage must be granted ‘directly or indirectly through state resources’. On the account that the proceeds resulting from the sale of allowances did not constitute a fore-going of revenues for the Member States, several commentators have been arguing that this was not the case. However, the view taken by these authors can no longer be sustained. Indeed, it is settled case law that the advantages granted to certain undertakings entailing ‘an additional burden for the public authorities in the form of an exemption from the obligation to pay fines or other pecuniary penalties’ are falling within the ambit of Article 107 TFEU. It therefore follows that a national cap-and-trade scheme offering free of charge the possibility to the undertakings covered by it to trade in emission allowances in order to avoid the payment of fines and conferring on these allowances the character of tradable intangible assets confers an advantage granted through State resources. In effect, the State could have sold such allowances or put them up

for an auction.\textsuperscript{40} Thus, there is a transfer of State resources in the form of loss of State resources.

Similarly, the fact that a Member State does not take advantage of the possibility granted to it under secondary legislation to auction off GHG emissions allowances is attributable to the state and financed out of the public purse.\textsuperscript{41} As is clear from the following example, by deciding not to sell allowances to installations for electricity production, the State is depriving itself of revenues that it could earn, were it to auction them.\textsuperscript{42} On the other hand, where allowances are sold at market price, there is no transfer of State resources.

However, the issuance free of charge of green certificates does not entail the transfer of State resources insofar as these certificates merely acknowledge that green electricity has been produced by the recipient undertaking.\textsuperscript{43}

2.3.3 The foregoing of State resources is inherent to the environmental regulation

Nevertheless, as will become clear from the following examples, it is not always easy to distinguish between a State aid and a classical regulatory measure. Indeed, measures which do not entail direct or indirect financial burdens for the State do not normally fall within the concept of a State aid, even where they represent an advantage for the undertakings concerned. Typical in this respect is the Preussen Elektra case.\textsuperscript{44} The Court of Justice has found that, even though it gives some economic advantage to the producers of this type of electricity, and entails a diminution in tax receipts for the State, that last consequence was an inherent feature of such a legislative provision. Accordingly, the obligation to purchase electricity produced from renewable sources at minimum prices does not involve any direct or indirect transfer of state resources to electricity production companies.\textsuperscript{45} Hence, there was not a direct connection between the German measure at issue and the possible loss of revenue.\textsuperscript{46} Accordingly, the German arrangements were not involving a transfer of State resources.

The opposite solution prevails where there is a sufficiently direct connection between the measure and the foregoing of State revenue. For instance, where the State has with respect to an ETS the choice between allocating allowances free of charge (grandfathering) or selling or auctioning them, the foregoing of resources cannot be considered as inherent ‘to the instrument designed to regulate the emissions of pollutants’.\textsuperscript{47}

2.3.4 Failure to implement environmental law

Insufficient attention has been hitherto given to the fact that environmental law suffers from the reticence of the authorities charged with applying it. All too often their indifference, negligence, incompetence, or even resignation, prevail over their obligations to apply the mandatory rules contained both in international law as well as sec-
ondary EU law. These shortcomings give national undertakings advantages that are sometimes considerable, as the latter may not incorporate in accordance with the polluter-pays principle environmental externalities into the price of their goods and services. However, in the absence of a transfer of State resources, these shortcomings fall beyond the definition of a State aid.48

2.3 Third condition: selectivity

2.3.1 Environmental measures and selectivity

Though they might comply with the two conditions described above, State measures will not amount to State aids within the meaning of the Treaty where they are not selective. In fact, in order for a State measure to be considered equivalent to a State aid, it is further necessary that it favours ‘certain undertakings or the production of certain goods’, rather than indiscriminately benefit all undertakings situated within the Member State.49 This criterion reflects the thinking that the more an aid measure is selective, the more it is likely to distort competition.

The following arrangements fulfil the prerequisites for selectivity:

– The granting of a rebate on a tax on the consumption of energy solely to undertakings manufacturing goods constitutes a selective advantage likely to lead to the qualification of State aid.50 In fact, a tax scheme establishing distinctions between manufacturing undertakings and undertakings furnishing services is not justified inasmuch as the consumption of energy by those sectors is harmful to the environment.51

– The measure aiming at facilitating the replacement of industrial vehicles by new vehicles is deemed to be selective when it is targeted at certain undertakings in particular SMEs, ‘albeit that they are not limited in number’.52 ‘… The exclusion of undertakings that are not SMEs from the benefit of the Spanish Plan cannot be justified on the basis of the nature and scheme of the system of which it forms part’.53

– The fact that the free collection of animal waste is essentially benefiting farmers and slaughterhouses underlines the fact that it does not constitute an arrangement of a general nature.54

2.3.2 General measures of economic policy and selective measures

Selective State aids stand in opposition to so-called general measures of economic policy which are not aiming at favouring specific products or sectors, but all undertakings in national territory, without distinction. These general measures cannot constitute State aid55 provided they are justified by the nature of the general structure of the system under which they fall. In effect, an economic benefit granted to an undertaking constitutes State aid only if, by display-

48 Thus, in a case where the Spanish authorities hadn’t required a producer of synthetic fibers to implement waste management standards, the Commission dismissed a complaint according to which these shortcomings were tantamount to a State aid. Given that there was any a transfer of State resources, the Commission ruled that Article 107 TFEU was inapplicable. [1998] OJ C 49/2.

49 The reference geographical framework is not necessarily the national geographical framework when a measure is taken by a sub-state entity enjoying both an institutional, procedural and economical and financial autonomy as far as its autonomous powers are concerned. See Case C-88/03 Portugal v. Commission [2006]; Joined Cases C-428/06 to C-434/06 Unión General de Trabajadores de La Rioja e. a. [2008]; and Joined Cases T-211 & 215/04 Government of Gibraltar v Commission [2008].

50 Case C-143/99 Adria-Wien Pipeline and Wietersdorfer & Peggauer Zementwerke [2001] ECR I-8365, paras. 43 to 53.

51 Ibid., para. 52.


53 Para. 41.

54 Case C-126/01 GEMO [2003], seen above, para. 38.

ing a degree of selectivity, it is such as to favour certain undertakings or the production of certain goods.

However, the criterion of selectivity is fulfilled where the administration called upon to apply arrangements of general nature disposes of a certain discretionary power with regard to the application of the regulatory measure, and where this discretionary power had the effect of favouring certain undertakings or the production of certain goods.56

That being said, the dividing line between measures which may constitute public subsidies, on the one hand, and measures forming part of a State’s general system, on the other, may sometimes be difficult to draw.57 As far as environmental policy is concerned, the distinction between general and selective measures proves to be particularly delicate. For example, the financing of a waste incinerator or a landfill by the public authorities will not particularly benefit any given undertaking. However, if it appears that an undertaking would be favoured by such infrastructure due to the fact that it would be the principal beneficiary, the prerequisite of selectivity would be met. This example shows how difficult it is to trace the dividing line between investments in public infrastructure and State aid.

In this regard the following question arises: must arrangements applicable to all industrial sectors, which are not de iure selective, but which de facto apply to a limited number of sectors, be considered as falling under Article 107(1) TFEU? The Netherlands NOx trading scheme case offers valuable insights into this issue.58 The question arose as to whether the national cap-and-trade scheme granting free allowances to 250 large polluting facilities was favouring a certain group of undertakings within the meaning of Article 107 TFEU. The 250 recipient undertakings were subject to the cap-and-trade scheme on the account that their thermal capacity was more than 20 MWth whereas the smaller undertakings were bound to comply with emission ceilings without having the possibility to take part in this trading scheme.

The General Court held that the measure was not selective for the following reasons: ‘the beneficiary undertakings are determined in accordance with the nature and general scheme of the system, on the basis of their significant emissions of NOx, and of the specific reduction standard to which they are subject’ and that ‘ecological considerations justify distinguishing undertakings which emit large quantities of NOx from other undertakings’.59 Furthermore, the General Court held that ‘that objective criterion is furthermore in conformity with the goal of the measure, that is, the protection of the environment and with the internal logic of the system’.60

However, the Court of Justice objected this reasoning. It held that: ‘Article [107(1) TFEU] does not distinguish between measures of State intervention by reference to their causes or their aims but defines them in relation to their effects. Even if environmental protection constitutes one of the essential objectives of the [EU], the need to take that objective into account does not justify the exclusion of selective measures from the scope of Article [107(1)TFEU], as account may, in any event, usefully be taken of the environmental objectives when the compatibility of the State aid measure with the common market is being

58 Case C-279/08P Commission v Netherlands [2011], above.
60 Ibid.
assessed pursuant to Article [107(3) TFEU]. In particular, the Court stressed that the fact that all national facilities were subject to emission reduction obligations was not sufficient enough to obliterate the differentiation introduced by the national authorities between the 250 large polluting plants and the other plants. In addition, the Court considered that the quantitative criterion to select the 250 major plants could not be regarded as inherent to the general scheme to reduce industrial atmospheric pollution.

2.3.3 Environmental taxes and selectivity

By definition, the arrangements governing State aids (articles 107 and 108 TFEU) and those governing distortions resulting from different treatment under tax law (articles 28, 30 et 110 TFEU) do not cover identical terrain. Despite the existence of these two different regimes, tax regulation is nonetheless liable to fall under the scope of the arrangements governing State aids. In other words, the fact that a tax measure complies with the requirements of provisions governing the free movement of goods does not however imply that it will be lawful under the terms of Article 107 TFEU.

Needless to say that the application of this provision to environmental taxation is a particularly delicate issue when the revenue from the taxation is generally allocated to public bodies which have the task of assisting undertakings in complying with their obligations under environmental law, or even in complying with more stringent environmental standards. Moreover, with a view to promoting more environmentally friendly economic innovation, eco-taxation provides for distinctions between different categories of goods or services in accordance with environmental considerations, which generally manifest themselves in the form of exemptions which may benefit certain categories of undertakings or the production of certain goods. What is more, exemptions from environmental taxes may be granted to polluting undertakings sometimes in order to permit them to absorb the shock of new tax arrangements, and at other times in order to remain competitive compared to foreign undertakings which are not subject to the same fiscal constraints. Accordingly, the adoption of new tax arrangements, especially with reference to the fight against climate change, may disadvantage certain categories of undertaking such as steelworks that are confronted with strong international competition. Last but not least, exemptions are also granted with a view to enticing undertakings to develop less polluting technologies.

The question over whether tax exemption arrangements have the effect of favouring ‘certain undertakings or the production of certain goods’ arose repeatedly when the first national regimes to fight global warming were adopted. The climate change tax in the United Kingdom provided for an exemption in favour of a certain number of economic operators which used certain technology, which created an advantage for them over other users which were forced to buy electricity taxed on the basis of environmental considerations. The British authorities stipulated that the exceptional arrangements applied to all

---

62 Para. 76.
63 Para. 76; opinion AG Mengozzi, para. 55.
65 An environmental tax has been defined by the Commission as a tax whose base has a negative effect on the environment or which seeks to tax certain activities, goods or services so that environmental costs may be included in the price. See Article 17(10) of the General Block Exemption Regulation No 800/2008 and para. 40 of the 2008 Guidelines on environmental aids.
66 In this connection, the Austrian energy tax at issue in Case C-143/99 Adria-Wien Pipeline is a good case in point.
undertakings which used the said technology, regardless of the extent of their exploitation or the economic sectors. Having concluded that these criteria were objective, the Commission found that the exemption was justified with regard to the general structure of the system into which it was incorporated.67

It follows that whenever the environmental tax reductions or exemptions are inherent in the logic of the national tax system, they fall outside the scope of Article 107(1) TFEU, provided that the conditions examined above are not satisfied. This may be illustrated by the following example. The Danish lawmaker has exempted undertakings covered by the EU ETS from the carbon tax on fuel consumption for production purposes.68 Whereas the Danish authorities argued that the exemption was inherent in the logic of the ETS, the Commission took the view that the proposed exemption was deviating from the logic of the system of reference that was the energy tax system and not the Danish ETS. The logic of that system was to tax each energy product consumed. As a result, the selectivity of the proposed exemption could not be justified by the nature and logic of the tax system.69

The national authorities must in any case take particular care to ensure that the tax exemptions or reductions do not have the effect of benefiting certain companies to the detriment of their competitors and, therefore, satisfy the criterion of specificity which is one of the prerequisites for the application of Article 107(1) TFEU.

67 Commission Decision to open the proceeding concerning aid C 18/2001-Climate change [2001] OJ C 185/03/22.
69 Para. 45.

The position of the Court of Justice on this question in Adria-Wien Pipeline and British Aggregates is instructive.

In Adria-Wien Pipeline, the Court of Justice was called upon to examine a partial exemption from the payment of an environmental tax on the consumption of natural gas and electricity by undertakings, which had not been granted only to undertakings producing tangible goods. This case is without doubt of interest. The Court held that the granting of benefits to undertakings the principal activity of which consisted in the manufacture of tangible goods was not justified by the nature or the general structure of the contested taxation system. Since the consumption of energy by the sector of undertakings producing tangible goods was also damaging for the environment as that of undertakings providing services, the environmental considerations underlying the tax arrangements did not justify a different treatment of these two sectors.70 The Court did not accept the argument by the Austrian government, which was inspired by the idea of maintaining the competitiveness of undertakings producing tangible goods, according to which the partial reimbursement of the environmental taxes concerned only to those undertakings was justified by the fact that they had been proportionally more affected than the others by the said taxes.71 Moreover, it is irrelevant whether the situation of the recipient of the measure has improved or worsened compared to the previous state of the law or, by contrast, has not changed through time.72 It is only neces-

70 Case C-143/99 Adria-Wien Pipeline et Wietersdorfer & Peggauer Zementwerke [2001], seen above, para. 52. See V. Gollinopoulous, ‘Concept of selectivity Criterion in State Aid definition Following the Adria-Wien Judgment – Measures justified by the Nature or General Scheme of a System’ (2003) 10 ECLR 543.
71 Case C-143/99 Adria-Wien Pipeline [2001], above, para. 44.
72 Para. 41.
sary to verify whether the State measure has the effect of favouring ‘certain undertakings or the production of certain goods’ within the meaning of Article 107(1) TFEU. Only a measure which is justified by the nature or general structure of the system into which it is incorporated will not satisfy the requirement of selectivity.

In *British Aggregates*, the General Court departed from that reasoning. The question arose as to whether an environmental tax on aggregates providing for an exemption in favour of aggregates produced from waste from the extraction of minerals created a selective advantage. The General Court held that the tax break was not selective. In particular, the General Court took care to underscore the margin of appreciation of the State: the Member States were free, when weighing up the different interests in play, to define their priorities in the area of environmental protection and accordingly to determine the goods and services which they decide to subject to this eco-tax. Moreover, the General Court justified this reasoning in view of the integration clause contained in the old Article 6 EC (Article 11 TFEU). As a result, the fact that such a levy does not apply to all similar activities which have a comparable impact on the environment does not mean that similar activities, which are not subject to the levy, benefit from a selective advantage.

This ‘highly innovative’ reasoning has however been objected to by the Court of Justice which found that the General Court had misconstrued Article 107(1) TFEU. According to the Court of Justice, this approach ended up cancelling out the effects of the aid measure having regard to the goal pursued by the tax arrangements, namely ‘the environmental objective’. This went against the traditional interpretation given to this provision of the Treaty, which did not distinguish between measures of State intervention by reference to their causes or aims but defined them in relation to their effects.

As a result, the General Court’s approach excluded that the selectivity of the non-imposition of an environmental tax on operators in comparable situations could be assessed in the light of the objective being pursued by the tax authority, independently of the effects of the fiscal measure in question. Moreover, ‘the need to take account of requirements relating to environmental protection, however legitimate, cannot justify the exclusion of selective measures, even specific ones such as environmental levies, from the scope of Article [107(1) TFEU]’. Besides, as AG Mengozzi underlined, ‘neither the compe-

---

73 In his opinion, AG Mislo took the view that the reimbursement rules favouring the manufacturing sector but discriminating the services sector did not constitute a State aid on the grounds that this scheme at issue was part of ‘a new general system of ecology taxes which from the moment of its conception was based on the principle that the primary and secondary sectors of the national economy could not reasonably be taxed proportionately to the whole of their electricity and gas consumption’. See Opinion AG Mislo in Case C-143/99 *Adria Wien Pipeline* [2001], seen above, para. 42. The objectivity of the criteria of the tax perception and the reimbursement’s subordination to criteria established by the legislature and not by administrative authorities attested, according to him, to the existence of an overall system of energy taxation (para. 43).

74 Case C-143/99 *Adria-Wien Pipeline* [2001], above, para. 42.

75 Case T-210/02 *British Aggregates v Commission* [2006] ECR II-2789, para. 86.

76 Para. 117.

77 Para. 115.


79 Case C-487/06 P *British Aggregates v Commission* [2008] ECR I-10505, para. 86.


81 Case C-487/06 P *British Aggregates v Commission* [2008], above, para. 87.

82 Para. 92.
ence enjoyed by the Member States in matters relating to taxation or the environment, nor the principle laid down by Article [11 TFEU] of the integration of environmental protection requirements into the definition and implementation of Community policies, justifies the wholesale removal of public measures that could distort competition from the ambit of the supervisory power conferred on the Commission by the Treaty rules on State aid.83

It is thus settled case law that the environmental integration clause enshrined in Article 11 TFEU84 should lead the Commission to take into account environmental goals pursued by the national lawmaker not when classifying the measure but exclusively when assessing its compatibility with paragraph 3 of Article 107 TFEU.85

Another environmental tax case deserves attention. EFTA authority claimed that under the Norwegian electricity tax system several tax exemptions were selective in nature on the grounds that they favoured within the meaning of Article 61(1) EEA manufacturing and mining industries compared to the service sector and the building sector. The aid in question could not be justified on the basis of the nature or general scheme of the tax system since the exemption of the sectors that consume the most electricity was running counter to the aim of the electricity tax, namely to ensure a more efficient use of electric power. The EFTA Court dismissed the applicants’ arguments that the tax exemption was non-selective.86

By contrast, both the Commission and the General Court held that the criterion of selectivity was not fulfilled in the following situations:

• where a Member State grants tax breaks on all products which are less polluting and takes care to avoid discriminating against foreign products,87
• when Germany applied the general regime of tax exemption to the arrangements put in place by German nuclear power stations for the purpose of the disposal of their radioactive waste and the permanent closure of their plants, and did not benefit the operators of these nuclear power stations compared to other subjects liable to pay the tax, which meant that the arrangements applied did not satisfy this condition;88

83 Opinion AG Mengozzi in Case C-487/06 P British Aggregates v Commission [2008], above, para. 102; Opinion AG Mengozzi in Case C-279/08 P Netherlands v Commission [2008] above, para. 63. 84 Article 11 TFUE requires that: ‘Environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development’. By the same token, Article 37 EUCHR asserts the requirement to integrate a ‘high level’ of environmental protection into the different EU policies and actions. Also known as the principle of integration, this clause is called upon to play a key role, not only due to the fact that it makes it possible to avoid interferences and contradictions between competing policies, but also because it may enhance sustainable development in favouring the implementation of more global, more coherent and more effective policies. See M. Wessmaier, ‘The Integration of Environmental Protection as General Rule for Interpreting Law’ (2001) CMLR 159–177; N. D’Hondt, Integration of Environmental Protection into other European EU Policies. Legal Theory and Practice (Groeningen, Europa Law Publishing, 2003); D. Grimmmeaud, ‘The Integration of Environmental Concerns into EC Policies: A Genuine Policy Development?’ (2000) EELR 207–218; W. Lafferty and E. Hovden, ‘Environmental Policy Integration: Towards an Analytical Framework’, 3 Environmental Politics (2003)1–22; N. de Sadeleer, ‘Enforcing EUCHR Principles and Fundamental Rights in Environmental Cases’ NJIL 81 (2012) 39–74.
85 Case C-487/06 P British Aggregates v Commission [2008], seen above, para. 92; opinion AG Mengozzi in Case C-487/06 P British Aggregates v Commission [2008], above, para. 102.
• finally, when the Netherlands planned tax measures in favour of non polluting cars which complied with EU standards in advance, since these measures were granted independently of the origin of the vehicles.89

However, even if the regime of exemptions is considered to amount to a State aid, nothing prevents the Commission from approving it. Indeed, both the 2008 guidelines on State aid for environmental protection90 as well as the in the Commission General Block Exemption Regulation No. 800/2008 (hereafter GBER)91 accept that environmental tax reductions or exemptions may be compatible with Article 107 (3)(c) TFEU. Such exceptions, which must be of a temporary nature, must however be necessary and proportional.92

2.4.3 Hypothecation of the tax for the State aid

It is also important to consider the hypothecation of the tax for the state aid.

In the SWNB and Pape cases,93 the plaintiffs challenged the legality of environmental taxes to which they had been subject, claiming that they were intended to finance a State aid. In these two cases, the Court of Justice found that only the taxes which ‘constitute the method of financing an aid measure, so that they form an integral part of that measure’ suffer the same fate as the aid measure itself. Indeed, for a tax, or part of a tax, to be regarded as forming an integral part of an aid measure, it must be hypothecated to the aid measure under the relevant national rules.94 It follows that these criteria are not satisfied where the revenue from the environmental tax is not allocated to a group of taxpayers.

In Pape, the Court of Justice held that since the national legislation at issue left to the authorities the decision over how to distribute the revenue from the tax on waste, there was no ‘hypothecation’ between the ecological tax and the aid considered.95 Similarly, in SWNB, the fact that the revenue from a tax on waste did not have any impact on the level of aid granted in a sector under the form of a tax exemption should lead the national courts to conclude that there was no ‘hypothecation’.96 To conclude with, the fact that the fiscal advantage resulting from the exemption is balanced out by an increase in the tax is not sufficient in order to establish the existence of a hypothecation.

2.5 Fourth condition: negative impact on trade between Member States

Finally, for the State measure at issue to be considered as State aid, it must be liable to affect trade between Member States. In particular, it is
still necessary to establish that this benefit has a negative impact on competition as well as on the free movement of goods. Needless to say that these two conditions are inextricably linked.

The Commission tends to regard the first condition as having been fulfilled automatically.97 Indeed, when aid granted by the State strengthens the position of an undertaking vis-à-vis other undertakings competing in intra-Community trade, the latter must be regarded as affected by that aid.98 By way of illustration, due to the fact that it reduces the cost of products, a waste management measure ‘appears to be an economic advantage liable to distort competition’.99 The second condition regarding the impact on intra-Community trade is also easily fulfilled.100 For instance, the Court of Justice held that a French measure exempting the costs of carcass disposal to be borne neither by farmers nor by slaughterhouses constitutes an advantage for national exports and affects intra-Community trade.101

Two exceptions should however be mentioned. The Commission has found that trade between the Member States is not affected where the beneficiaries are public or private bodies providing local or regional public services which have not been opened up to competition with transporters established in other Member States. In effect, given the absence of liberalisation of a specific type of transport, the beneficiaries do not compete with transporters in other Member States.102 Accordingly, the State aid in question cannot affect trade between the Member States unless the beneficiary transport undertakings are in competition with foreign undertakings. Besides, under the terms of Regulation 1998/2006,103 so-called de minimis aids, which do not exceed 200,000 Euros over a period of three years and are granted to the same undertaking, do not fulfil the prerequisite affecting competition or trade.

3 Exemptions

3.1 Introductory remarks

The prohibition in principle of State aids is neither absolute nor unconditional and is subject to numerous exceptions. In this regard, the absence from Treaty law of express exceptions for environmental protection State aids has not prevented the emergence of an administrative praxis favourable to the granting of these types of aids on the basis of Article 87(2) and (3) EC, which has now become Article 107 TFEU.104 Whereas paragraph 2 lists certain categories of aid which are deemed to be compatible with the internal market, paragraph 3 lists other categories which may be considered to be compatible with Article 107 TFEU.

Article 107 (2)(b) TFEU sets out the aids ‘to make good the damage caused by natural disasters or exceptional occurrence’. Given that these aids are characterised by a solidarity approach, they are for this reason fully admissible. In principle, aids relating to environmental matters

97 Commission Decision of 26 November 2003 on the aid scheme which Italy (Region of Piedmont) is planning to implement for the reduction of airborne pollution in its territory [2006] OJ L 32/82.
99 Case GEMO [2003], seen above, para 33.
100 Opinion AG Jacobs in Case C-278/92 to C-280/92 Spain v Commission [1994] ECR I-4103, para. 33. See also Commission Decision on the second German NAP of 29 November 2006, para. 2.2. Where Member States decide to grandfather allowances to installations for electricity production, Article 10c(3), 10c(5) e), 10c(6) of the ETS Directive sets out a number of requirements to avoid distortions of competition.
101 Case GEMO [2003], seen above, paras. 42–43.
104 Case Adria-Wien Pipeline [2001], seen above, para. 31.
do not fall under this paragraph. However, the granting of an aid under the terms of this provision should be possible where the public authorities have to deal with far-reaching changes to ecosystems caused by a natural disaster or exceptional occurrence (drought, fires, wide-scale pollution, reduction of fishing resources, etc.). For instance, floods occurring in Netherlands – likely to increase with climate change – gave rise to aids falling within the ambit of that paragraph.

By contrast, paragraphs b) and c) of Article 107(3) TFEU contain two grounds for exemption that are likely to be much more relevant for environmental aids. These paragraphs run as follows:

(b) ‘aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State’;
(c) ‘aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest’.

Under the terms of paragraph b), concerted actions by different Member States as part of the fight against a common threat, such as environmental pollution, were accepted until 2001 by the Commission. Since 2001, State aids can always be admitted on the basis of paragraph 3(b), in exceptional circumstances, provided that they respect conditions such as the ‘exemplary’ and ‘substan-
tive’ contribution of an ‘important project of common European interest which are an envi-
ronmental priority’. However, the mere fact that investments may have been able to establish the use of a new technology does not necessarily mean that the project is in the general interest.

When applying paragraph c) which grants it a broad margin of appreciation, the Commission has adopted various guidelines setting out the criteria for the compatibility of certain environmental aids and which have accordingly been used as a basis for its practice. Thus this paragraph has operated since 1994 as the legal basis for the adoption of a range of Commission guidelines. By accordingly specifying the categories of State aids that are compatible with Article 107 TFEU, the Commission has established a quasi-regulatory competence.

It is also important to point out that the incorrect application of the obligations stemming from secondary environmental legislation does not prevent the Commission from assessing the compatibility of the contested aid with Article 107 TFEU. Thus the General Court did not uphold the argument by four operators of hotels which challenged the granting of a state aid to a competitor on the grounds that it misconstrued directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment. Indeed, where an infringement of that directive ‘is liable, in an appropriate case, to proceedings for a declaration that the Member State has failed to fulfil its obligations under Article 258 TFEU’, it cannot constitute a serious difficulty as regards the Commission’s assessment of the compatibility of the disputed aid with the common market.

---

105 Until now, the Commission hasn’t accepted yet that State aids granted in response to sensitive modifications of the natural environment may be allowed in accordance with Article 107(2) b) TFEU. See Commission Decision 108/C 291/05 [1998] OJ C 291/4, p. 11.
106 XXIVth Competition Report, para. 354.
107 Paras. 147–150 of the 2008 Guidelines state that this exemption applies as a secondary ground.
In accordance with its 2005 action plan on State aids, the Commission has concluded that State aids should not be granted other than with a view to achieving an objective of common interest, correcting market failures or favouring social and regional cohesion, or even sustainable development. These aids must accordingly create adequate incentives that are proportional to their objectives and distort competition as little as possible. This 2005 action plan resulted in a remodelling of the control exercised by the Commission: first, it led to the adoption in 2008 of new guidelines on environmental aids decidedly more complete than the previous ones; secondly, it resulted in the inclusion by the Commission of numerous criteria relating to environmental protection aids in the Commission General Block Exemption Regulation No. 800/2008 (GBER). As a result, national authorities have to assess whether their aid measures aiming at improving the environment are likely to be justified under one of the head of the 2008 guidelines or be exempted of notification in accordance with the provisions of the GBER. Hierarchically superior, the GBER will be examined before the guidelines. In addition, special emphasis will be placed on the legal nature of these two instruments.

### 3.2 General Block Exemption Regulation

In order to guarantee effective oversight over the granting of State aids and to simplify administrative management, without however weakening the Commission’s control, the Council has in 1998 granted the Commission the power to issue regulations declaring certain categories of horizontal aids compatible with the internal market and to exempt them from the notification requirement provided for under Article 108 (3) TFEU.

On the basis of the experience which it obtained thanks to the previous environmental guidelines, the Commission has incorporated several categories of environmental protection aids into its regulation No. 800/2008. Consolidating the previous systems of block exemptions into one instrument, the GBER, for the first time, contains a cluster of exemptions in the environmental field. Accordingly, the GBER exempts from the notification requirement investment aid for environmental protection of 7.5 millions Euro per undertaking per investment project.

There is a clear advantage: not being subject to the standstill obligation, the aid measures can

---

112 Paras. 10 and 11 of the 2005 Action Plan.
115 Council Regulation (EC) No 994/98 of 7 May 1998 on the application of Articles 92 and 93 of the Treaty establishing the European Community to certain categories of horizontal State aid [1998] OJ L 142/1. The Commission, when it adopts regulations exempting categories of aid, must specify the purpose of the aid, the categories of beneficiaries and thresholds limiting the exempted aid, the conditions governing the cumulation of aid and the conditions of monitoring. See recital 6.
116 Recital 3 to the GBER.
118 Articles 3 and 6(1) b.
be implemented immediately. In contrast to the 2008 guidelines, as discussed below, operating aid does not fall within the scope of the regulation.

The essential utility of these new arrangements consists in the reduction of the administrative burden of the Commission, which is no longer required to exercise prior control pursuant to Article 108(3) TFEU over aid regimes that are compatible with the criteria specified in the GBER. By contrast, State aids which are not covered by this regulation remain subject to the notification requirement provided for under Article 108(3) TFEU, irrespective of whether they comply with the conditions specified under the 2008 guidelines.

Finally, the GBER varies the distribution of competences between the Commission and the national courts, as the latter may henceforth verify directly whether the State aids satisfy the criteria of compatibility as laid down by the Commission and whether they may in consequence be granted without prior notification to the latter.

3.3 2008 Environmental Guidelines

3.3.1 General considerations as regards State aids guidelines

Given the vagueness of the Treaty provisions on State aids and the initial unwillingness of the Council to enact secondary legislation with the aim of fleshing out the exemption criteria, the Commission has made a virtue out of a necessity and developed exemption criteria through a flurry of soft law instruments. Since the start of the 1970s, the Commission has become aware that it will not be able to eliminate State aids completely. Resolutely pragmatic, it has delineated the scope of the exceptions through a succession of guidelines the object of which is to simplify the task of Member States wishing to provide assistance to their undertakings. Where it uses the technique of the guidelines, the Commission must respect the following obligations: first the guidelines may not in any way derogate from Treaty provisions; secondly, the Commission is bound by the general rules which it has adopted, and may not set them aside in individual cases. Reference to the guidelines amounts to a proper statement of reasons.

Since 1974, various guidelines have been issued in the field of environmental law as well as to increase legal certainty and the transparency of the decision-making. Whilst the first guidelines authorised the granting of ‘aid to promote the execution of an important project of common European interest’, pursuant to the old Article 92(3)(b) of the EEC Treaty, they were replaced by a series of guidelines (respectively in 1994, 2001 and 2008) which based the new exemption regimes on Article 87(3)(c) EC (‘aids to facilitate the development of certain economic activities or of certain economic areas’) which has detailed rules for the application of Article 93 of the EC Treaty, OJ 1989 L83/1.

120 Article 3.
126 Para. 12 of the 2008 Guidelines.
127 Doc. SEC (74) 4264.
now become Article 107 TFEU. Moreover, whilst the 1974 guidelines were transitional, it quickly became apparent that the elimination of aids was nothing other than pie in the sky. Moreover, the Commission progressively expanded the scope of the exceptions.

In contrast to the GBER, the guidelines do not exempt the national authorities from the requirement to notify aids to the Commission, even where they are compatible with their requirements. That said, the Member States will find useful indications in the guidelines regarding the criteria which the EU executive will apply when examining an aid. Accordingly, when the criteria established by the guidelines are respected, the aid planned will be viewed favourably by the Commission.

Finally, nothing prevents the Commission from examining and, where appropriate, approving aids which exceed the thresholds provided for under the guidelines on the basis of Article 107 (3)(c) TFEU. Until the end of 2014, the granting of State aids which do not fall within the scope of the GBER will therefore have to be assessed by the Commission with reference to the criteria laid down in these guidelines. Since it applies to all State aids intended to assure environmental protection in all sectors governed by the Treaty, including those which are subject to specific EU rules on state aid (SME), the field of application of these guidelines is particularly broad. Accordingly, the Commission may examine an aid with reference to several provisions of EU law, even if it means applying to it the more favourable arrangements.

A ‘standard’ examination is required for State aid measures for amounts below a certain threshold (chapter 3) whilst a more detailed examination is required for aids above that threshold (chapter 5). Indeed, as regard aid measures likely to entail a higher risk of completion distortion, further scrutiny appears to be necessary.

The following aids are subjected to a close examination:
- investment aid: where the aid amount exceeds EUR 7.5 million for one undertaking;
- operating aid for energy saving: where the aid amount exceeds EUR 5 million per undertaking for five years;
- operating aid for the production of renewable electricity and/or combined production of renewable heat: the aid is granted to renewable electricity installations in sites where the resulting renewable electricity generation capacity exceeds 125 MW;
- operating aid for the production of biofuel: when the aid is granted to a biofuel produc-

---

132 Para. 142.
133 Para. 12.
134 Para. 59.
tion installation in sites where the resulting production exceeds 150,000 t per year;
- operating aid for cogeneration: where aid is granted to cogeneration installation with the resulting cogeneration electricity capacity exceeding 200 MW. Aid for the production of heat from cogeneration will be assessed in the context of notification based on electricity capacity.

The 2008 guidelines build on the results of the previous guidelines. As hinted as above, an undertaking does not have an incentive to go beyond mandatory standards if the cost of doing so exceeds the benefit for the undertaking. Admittedly, State aid may be an incentive to improve environmental protection. Conversely, aid to assist undertakings to comply with EU standards already in force should not be authorised on the grounds that such aid would not lead to a higher level of environmental protection. Since 1994, the Commission has only accepted aids to investment which comply with new mandatory standards or other new legal obligations.

Aids for investment in new installations are in principle prohibited on the grounds that they run contrary to the polluter pays principle. Similarly, according to the provisions of the GBER, operating aid is not in principle authorised.

Even though the 2008 guidelines essentially concerns investment aids, the guidelines provide for several exemption regimes in favour of operating aid on energy efficiency grounds, renewable energy and cogeneration. These aids, which do not fall under the GBER, must therefore be assessed in accordance with the criteria laid down in the 2008 guidelines.

Investment aids may be granted up to a gross amount equal to 50% of eligible costs, which may be increased depending on the size of the undertaking. The calculation of the amount of the aid is based on the supplementary environmental investment costs rather than on the total cost of the investments.

In addition in virtue of both the GBER and the 2008 Guidelines, small and medium-sized undertakings are entitled to obtain increased level of aid.

3.3.3 Categories of environmental State aids covered by the GBER and the 2008 Guidelines

The 2008 Guidelines list twelve categories of aid measures, some of which are not covered by the GBER. Moreover, the intensity of the maximum aid for investment in new installations are in principle prohibited on the grounds that they run contrary to the polluter pays principle. Similarly, according to the provisions of the GBER, operating aid is not in principle authorised.

Even though the 2008 guidelines essentially concerns investment aids, the guidelines provide for several exemption regimes in favour of operating aid on energy efficiency grounds, renewable energy and cogeneration. These aids, which do not fall under the GBER, must therefore be assessed in accordance with the criteria laid down in the 2008 guidelines.

Investment aids may be granted up to a gross amount equal to 50% of eligible costs, which may be increased depending on the size of the undertaking. The calculation of the amount of the aid is based on the supplementary environmental investment costs rather than on the total cost of the investments.

In addition in virtue of both the GBER and the 2008 Guidelines, small and medium-sized undertakings are entitled to obtain increased level of aid.

The 2008 Guidelines list twelve categories of aid measures, some of which are not covered by the GBER. Moreover, the intensity of the maximum aid for investment in new installations are in principle prohibited on the grounds that they run contrary to the polluter pays principle. Similarly, according to the provisions of the GBER, operating aid is not in principle authorised.

Even though the 2008 guidelines essentially concerns investment aids, the guidelines provide for several exemption regimes in favour of operating aid on energy efficiency grounds, renewable energy and cogeneration. These aids, which do not fall under the GBER, must therefore be assessed in accordance with the criteria laid down in the 2008 guidelines.
aid is higher concerning the aids covered by the 2008 Guidelines than for those referred to in the GBER.\textsuperscript{146} The following table lists the different categories of aids as well as their regulatory bases.

degradation and will transfer responsibility of these onto society. As a result, the polluter would be relieved to bear the burden of paying the costs of his pollution. The TFEU provides no guidance

<table>
<thead>
<tr>
<th>Categories of aids</th>
<th>Provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment aid enabling undertakings to go beyond Community standards for environmental protection or increase the level of environmental protection in the absence of Community standards</td>
<td>Paras. 73 to 84 of the Guidelines; Article 18 GBER.</td>
</tr>
<tr>
<td>Aid for the acquisition of new transport vehicles</td>
<td>Paras. 85 to 86 of the Guidelines; Article 19 GBER.</td>
</tr>
<tr>
<td>Aid for early adaptation to future Community standards for SMEs</td>
<td>Paras. 73 to 84 of the Guidelines; Article 20 GBER. The GBER is only applying to SMEs.</td>
</tr>
<tr>
<td>Aid for environmental studies</td>
<td>Paras. 91 to 93 of the Guidelines; Article 24 GBER.</td>
</tr>
<tr>
<td>Environmental aid for energy saving measures</td>
<td>Paras. 94 to 100 of the Guidelines; Article 21 GBER. The GBER only coverts investment aids and not operating aids.</td>
</tr>
<tr>
<td>Environmental aid for the promotion of energy from renewable energy sources</td>
<td>Paras. 101 to 111 of the Guidelines; Article 23 GBER. The GBER only coverts investment aids and not operating aids.</td>
</tr>
<tr>
<td>Environmental investment aid for high-efficiency cogeneration</td>
<td>Paras. 112 to 125 of the Guidelines; Article 22 GBER.</td>
</tr>
<tr>
<td>Aid for waste management</td>
<td>Paras. 126 to 131 of the Guidelines.</td>
</tr>
<tr>
<td>Aid for the remediation of contaminated sites</td>
<td>Paras. 132 to 134 of the Guidelines.</td>
</tr>
<tr>
<td>Aid for the relocation of undertakings</td>
<td>Paras. 135 to 138 of the Guidelines</td>
</tr>
<tr>
<td>Aid involved in tradable permit schemes</td>
<td>Paras. 139 to 141 of the Guidelines</td>
</tr>
<tr>
<td>Aid in the form of reductions or of exemptions from environmental taxes</td>
<td>Paras. 151 to 159 of the Guidelines; Article 25 GBER. The GBER only applies to tax reductions harmonized at the European level.</td>
</tr>
</tbody>
</table>

3.3.4 Consistency of environmental State aids with the polluter pays principle

At first sight, State aids run counter not only to competition law but also to a principle at the heart of environmental policy, the polluter pays principle. In fact, thanks to the granting of aid to cover investments to combat pollution, the recipient undertaking will not incorporate into its costs the externalities relating to environmental

\footnote{146 Recital 49 to the GBER.}

for resolving this conflict. However, there are some reasons to consider that granting State aids is likely to be compatible with the polluter pays principle for the following reasons.

Firstly, an over zealous application of this environmental principle is not acceptable. Indeed, since 1975, the Commission has recognised the difficulties in an immediate and wholesale application of this principle.\textsuperscript{147} Recognising the

\footnote{147 In its 75/436/Euratom, ECSC, EEC: Council Recomm-
limits to which this principle is subject, the Commission accepts that the principle does not prevent the granting of State aids.\textsuperscript{148}

Secondly, certain categories of aids make it possible to rectify market failures,\textsuperscript{149} where the market does not allow for the incorporation of negative externalities into the price of goods and services. This affirmative action will prevent the best pupils from being penalised. For example, given the competitive advantage which the producers of energy from fuel or coal gain over the producers of energy from renewable sources, there will be a case for the public authorities to correct this failure. In this regard, tax regimes favourable to undertakings which develop more environmentally friendly production methods are compatible with the polluter pays principle.\textsuperscript{150} Similarly, State aids which satisfy the criteria contained in the 2008 guidelines or the GBER are considered to be compatible with the polluter pays principle.\textsuperscript{151}

Thirdly, the ability to grant State aids may also permit the Member States to adopt standards that are more stringent than EU standards by lowering unsustainable burdens incumbent upon certain undertakings.\textsuperscript{152}

This does not however mean that any form of aid may be admitted, quite the opposite. Since under the terms of the polluter pays principle the internalisation of the costs of pollution must be

\begin{itemize}
\item granted priority, State aids may only be granted sparingly, and especially as incentives for the undertaking to make additional investments which permit it to go beyond mandatory standards, or to invest in renewable energies.\textsuperscript{153} The granting of aids is nothing but a ‘last resort’, an ‘alternative’,\textsuperscript{154} or a ‘second-best option’\textsuperscript{155} since the polluter pays principle remains the rule.\textsuperscript{156} Some aids are certainly incompatible with this principle. This is the case for aids intended to offer a breath of fresh air for undertakings in order to facilitate their adaptation to new standards, or in order to remain competitive internationally. They serve no purpose in the fight against pollution.\textsuperscript{157} By the same token, where allowances are granted free of charge with a view to helping undertakings to meet environmental standards, they are deprived of any incentive effect.

What is more, where the Commission seeks to reconcile competition policy with environmental policy in the light of the polluter pays principle, the 2008 guidelines and the GBER will only accept State aids that are capable of being justified by the need to apply more stringent environmental protection standards than those provided for under EU law or, where no standards have been adopted by the Union, that are likely to increase the level of protection resulting from the activities of the undertaking.\textsuperscript{158,159} The aids must therefore have an incentive effect.\textsuperscript{160}

\end{itemize}
Accordingly, they cannot guarantee activities the economic viability of which offers cause for concern. This means that the aids cannot cover investments designed to permit undertakings to deal with the costs resulting from bringing their operations into line with existing EU environmental provisions.161,162

The role played by the polluter-pays principle has been underlined in GEMO by Advocate general Jacobs:

‘In its State aid practice the Commission uses the polluter-pays principle for two distinct purposes, namely (a) to determine whether a measure constitutes State aid within the meaning of [Article 107(1) and (b) TFEU] to decide whether a given aid may be declared compatible with the Treaty under [Article 107(3) TFEU].

In the first context, that of [Article 107(1) TFEU], the principle is used as an analytical tool to allocate responsibility according to economic criteria for the costs entailed by the pollution in question. A given measure will constitute State aid where it relieves those liable under the polluter-pays principle from their primary responsibility to bear the costs.

In the second context, that of [Article 107(3) TFEU], the polluter-pays principle is used by contrast in a prescriptive way as a policy criterion. It is relied on to argue that the costs of environmental protection should as a matter of sound environmental and State aid policy ultimately be borne by the polluters themselves rather than by States’.163

To conclude with, the polluter pays principle therefore provides a standard for analysis which makes it possible to determine on whom the costs fall in order to establish whether a given measure constitutes a State aid pursuant to Article 107 (1) TFEU. A State measure which relieves those actors of those costs is thus to be regarded as an economic advantage capable of constituting State aid.164

3.3.5 Consistency of environmental State aids with the proportionality principle

It is not sufficient that an aid has positive environmental effects in order to be justified or exempted pursuant either the 2008 Guidelines or the GBER. The proportionality principle requires that a subsidy cannot be higher than the level necessary in order to achieve the environmental protection goals pursued. When national authorities invoke environmental protection considerations, they must therefore establish the necessary link between the restriction placed on competition and the goal of protecting the environment. This means that an aid will be struck down where a measure of a different nature, which would have had less of an impact on trade or on competition, could have been adopted. The 2008 guidelines place particular emphasis on the proportionality of the aid, since it must ‘be limited to the minimum needed to achieve the protection sought’.165

As a result, all economic benefits which the in-

161 Para. 75 of the 2008 Guidelines.
162 Thus, when the aid granted to an undertaking has for effect to allow the authorities to abide by environmental obligations stemming from EU secondary law, notably regarding the recycling of packaging waste, it is not granted with a view to exceeding the standards applying to the recipient undertaking. In that case, the incentive criterion set out in the 2001 Guidelines was not respected. See Commission Decision 2003/814/EC of 23 July 2003 on the State aid C 61/2002 which the United Kingdom is planning to implement for a newsprint reprocessing capacity support under the WRAP programme, para. 119 [2003] OJ L 314/26).

163 Opinion AG Jacobs in Case C-126/01 GEMO [2003], seen above, paras. 68 to 70.
164 Paras. 71 & 72.
165 Para. 30 and following of the 2008 Guidelines. See also para. 20 of the 2005 State aid action plan, according to which the positive impact of an aid depends on whether it is proportionate in the sense that the expected change in behaviour could not be achieved with less aid.
vestment entails must be in principle extracted from the extra net costs."166

As is shown by the following cases, proportionality has always been playing a decisive role in leading the Commission to limit the anti-competitive effects of these aids to a bare minimum.

In order to encourage the disposal of surplus manure in an ecological manner, the Dutch government sought to establish a regime of aids, consisting in the financing the construction and exploitation of treatment facilities for this organic waste by the 'national manure bank'.167 These arrangements, which were intended to encourage producers of manure to deliver their excess waste to the national bank rather than to dispose of it in the environment were to be totally financed by revenue from a levy paid by pig breeders which produced an excess of manure. The Commission observed that the intervention of the national bank would permit manure processing facilities to be built more quickly and, for this reason, could reinforce the competitive position of intensive breeding in the Netherlands. Moreover, since the processing of excess manure would lead to the production of solid organic fertiliser, the aid concerned was also likely to favour the competitive position of manure processing undertakings compared to the producers of organic and chemical fertilisers. The Commission concluded that the aid concerned could only be regarded as compatible with the common market pursuant to the old Article 92(3)(c) EEC (Article 107(3)(c) TFEU), provided that it did not exceed the fixed costs consisting in the administrative and construction costs and the costs for the maintenance of the storage infrastructure by the Dutch bank and provided that it did not last longer than an initial period of two years. All operating aid for installations was therefore considered to be prohibited.

Similarly, the Commission concluded that an initiative taken in order to assist a paper manufacturer in order to transfer its production site with a view to reducing its impact on the local environment could not benefit from an exemption from the prohibition on the granting State aids due in particular to the absence of any requirement for such an aid in order to achieve the objective pursued.169

By the same token, it found that a Walloon regional regulation which provided for the granting of aids not only to undertakings which installed new less polluting equipment – the recycling and recovery of waste were eligible – but also to the producers of this equipment was manifestly disproportionate to the objectives which it was supposed to pursue.170 In 1989 it opposed the granting of a measure of aid by the French Air Quality Agency to industries which carried out investment into desulphurisation on the grounds that, due to its importance, it could have anti-competitive effects.171

166 Para. 31 of the 2008 Guidelines.
168 The Commission had, at first, exempted in virtue of Article 92(3) c) EC the aids necessary to the construction of the first installations of disposal of manure. See Commission Communication on the basis of Article 93(2) EC, addressed to other Member States and interested third parties, concerning aid envisaged by the Netherlands Government in favour of attempts projects of the disposal of manure [1991] OJ C 82/3.

170 Commission Communication on the basis of Article 93, para. 2, EC, addressed to other Member States and interested third parties, concerning the environmental investment aids [1994] OJ C 100/5. The proceeding was closed after a modification of the regulation of the Walloon Region.

171 21st Annual Report on Competition Policy (1990), n° 198.
The Commission finally found that an aid seeking to subsidise the production of newspaper which could have been exempted under the terms of Article 107 (3)(c) TFEU did not satisfy the prerequisites of necessity and proportionality, since the investments appeared to be disproportionate compared to the objective of recycling waste. In this case, the financing of a paper recycling plant did not appear to be proportionate on the grounds that it did not result in a reduction in the quantity of waste deposited in landfill, but that it encouraged the use of recycled paper for the production of newspapers.

On the other hand, the Commission has shown greater flexibility when the anti-competitive effects of an aid do not prove to be disproportionate. Accordingly, in February 1990 the Commission approved the granting of tax relief to Danish undertakings which used at least 50% of recycled material as raw materials for their production. This relief was justified by the fact that the undertakings using recycled material produced quantities of waste decidedly greater than undertakings which used non recycled materials and for this reason ended up being penalised by the tax on waste disposal. The Commission also adopted a more pragmatic approach when approving temporary relief from environmental taxation arrangements which was necessary in order to prevent national undertakings from being disadvantaged on the international market.

For the chemical industry, the Commission found that investments intended not to combat ecological damage but to prevent catastrophic occurrences and to guarantee the safety of adjacent residence could not be subsidised insofar as they amounted to an essential element of the activity of the undertakings concerned.

4 Procedural Standards
4.1 Introductory comments

Article 108 TFEU, as well as Council Regulation No 659/1999/EC of 22 March 1999 laying down detailed rules for the application of Article 93 EC, regulate the control procedure for State aids which is operated by the Commission. In contrast to the new arrangements for applying Article 101 TFEU, the Commission continues to be notified of all plans to grant aid, the application of which must moreover be suspended pending its ruling on them. As discussed above, the existence of guidelines specifically dedicated to aid does not relieve the States of their obligation to notify all of their aid arrangements. By contrast, aid falling within the scope of application of the GBER is not subject to the notification requirement.

The Member States are subject to precise obligations in order to facilitate the task of the Commission and to prevent the latter from being confronted with a fait accompli. After the notification stage, the Member State has every interest in informing the Commission of the environmental justifications capable of rendering its aid compatible with the common market. If the Commis-

---

176 [1999] OJ L 83/1. Since the adoption of this regulation, Article 93 EC has become Article 88 EC then Article 108 TFEU.
177 See Article 9 GBER.
In a judgment of 16 September 1998, the General Court did not recognise this status to an undertaking which complained that the aid concerned entailed an increase in taxes on waste which it was obliged to pay. The Court found that it had to pay this tax in its objective capacity as the producer of waste on the same grounds as any other operator in the same situation, which meant that it could not argue that the aids concerned affected its competitive position on the market. The Court added that to follow the applicant’s reasoning would amount to recognising that any taxpayer is a party concerned within the meaning of Article 108(2) TFEU. On the other hand, tax relief granted to undertakings which are current or potential customers of the applicant directly affects its competitive position on the market, with the result that it has the status of a party concerned.

As regards a levy on waste accompanied with some exonerations assuming the character of State aids, the Court of Justice judged that Article 108(3) TFEU, had to be interpreted ‘as meaning that it may be relied on by a person liable to a tax forming an integral part of an aid measure levied in breach of the prohibition on implementation referred to in that provision, whether or not the person is affected by the distortion of competition resulting from that aid measure’. In that way, the Court adopted an extensive conception of the interest on which persons liable to environmental tax can invoke the direct effect of Article 108(3) TFEU. They will not have to demonstrate that they were affected by the aid.

---

179 Article 23(1) of Council Regulation No 659/1999/EC.
180 Case C-157/01 Danske Bunsvoignmaend v Commission [2004], para. 41. It must be noted that undertakings may face an uphill battle when challenging Commission decisions taken within the framework of EU ETS and not pursuant to Article 4(3) of Regulation N° 659/1999. See in Case T-387/04 EnBW Energie Baden-Württemberg AG [2007] above, para. 41.

---

182 Para. 80.
5 Concluding remarks

Although environmental and competition policy have hitherto been able to evolve in perfect independence, the former thanks to an intense regulatory approach and the latter through the case law of the Commission and the Court of Justice, the interactions between the two have recently become intense and have been dogged by controversy.

On the one hand, environmental law is by nature likely to increase competition between undertakings, which must express in monetary terms the environmental costs resulting from their activities. A strict application of the environmental regulations should lead first to the disappearance of economic operators which are not able to respect the new environmental requirements and, secondly, should encourage other undertakings to equip themselves with less polluting production techniques. Only the most competitive operators, and hence the least polluting, will therefore remain present on the market, with the risk of creating oligopolies. What is more, the continued granting of State aids is controversial since they are not entirely compatible with the polluter pays principle, which the principle of integration rightly has the effect of extending to competition law.

On the other hand however, the interaction between the two policies may also be detrimental to the conservation of natural resources. In fact, competition law may indeed challenge investments made by undertakings seeking to pursue an environmental policy since, in accordance with Article 107 TFEU, they may not in principle benefit from State aids.

Through its influence, both negative and positive, on the development of competition law, the integration clause may to a certain extent alleviate these tensions. Accordingly, State aids which represent a threat to the protection of the environment must be prohibited by the Commission, even if they comply with competition law requirements. By contrast, State aids which are manifestly beneficial for the environment should be more easily accepted where their anti-competitive effects are not disproportionate.

Given the broad scope of the notion of State aids, a number of environmental measures are likely to fall within the ambit of the prohibition laid down in Article 107 TFEU. That did not prevent the Commission to develop its own vision of a well tailored State aid policy regarding the protection of the environment. The broad criteria laid down in paragraph 3 have been fleshed out into a complex cluster of soft law instruments (guidelines) and hard law (GBER). The Guidelines criteria do not deprive the Commission to play a key role in weighing the positive environmental impacts of the national measure against the potential negative effects for competition and trade. Through this balancing test, the Commission is called on to assess whether the aid is appropriate and necessary to attain the objective of common interest. The incentive effect of the aid is taken into consideration. Needless to say that the thresholds laid down by the Commission influence significantly national environmental policies.

Be that as it may, competition law will not resolve the problems of pollution on its own, as it is nothing more than an instrument in the service of environmental policy.
Helping biodiversity adapt to climate change
– implications for nature conservation law in Finland

Suvi Borgström

Abstract
Biological diversity is expected to come under increasing stress, and a number of species are to become threatened with extinction on account of climate change. As it is inevitable that climate will change in future decades, regardless of mitigation actions to reduce greenhouse gas emissions, there is a growing need to increase the adaptive capacity of the species and habitats. Several policy documents and literature on conservation biology have proposed a number of proactive measures that seem to be required in order for species and habitats to adapt to climate change. These measures include protecting and restoring large robust natural areas, ensuring connectivity between those areas, increasing the resilience of the species and ecosystems to changing conditions, and in some cases undertaking active translocation of populations in climatically more suitable areas. Even though the Habitats Directive was not created the climate change in mind, it provides a legal basis for these adaptation measures. This article aims at analyzing how Finland has implemented the provisions of the Habitats Directive that are relevant for climate change adaptation. The aim is to assess to what extent the Finnish nature conservation legislation is able to answer the challenges that climate change poses for species and habitats.

1 Introduction
Several scientific articles have been devoted to assessing the current capacity of international and European nature conservation regimes to facilitate the adaptation of species and ecosystems to climate change. Those assessments have revealed weaknesses in contemporary regimes regarding the adaptation.2 In the case of nature conservation in the European Union, it has been argued that there are needs for minor or major amendments to the Birds3 and/or Habitats Directive4, or for complementing or replacing them with a new EU legislation in order to facilitate the adaptation of species and habitats to climate

---


change. However, other authors have argued that the Directives already pose legal obligations for member states to take adaptation measures. The argument goes, that without taking adequate action to facilitate the adaptation of species and habitats to climate change, the aims of the Birds and Habitats Directives cannot be achieved, and EU member states cannot meet their obligations under the Directives.

It is indeed evident that the Directives do contain provisions that at least enable member states to take measures to help the species to adapt to climate change and, of course, member states can do more than is required. However, most of the provisions that are relevant for adaptation measures are formulated in a way that seems to lack legal teeth, and as Verschuuren has pointed out, there are not many indications that member states are willing to go much further than what is legally required.

Given the lack of political will to reform the European Union nature conservation legislation in the foreseeable future, the pressure for taking adaptive action will be on member states. Thus, it is important to examine the legal implications of climate change adaptation on national level. This article aims at analyzing how Finland has implemented the provisions of the Habitats Directive that are relevant for climate change adaptation. The idea is to explore the implications of climate change for Finnish nature conservation law by using three adaptation measures as a reference point: restoration, assisted migration, and increasing the connectivity between protected areas. The analysis also serves the purpose of assessing the extent to which measures should be taken at the EU level and which measures could rather be taken at the national level.

The article is structured as follows: Second chapter shortly introduces the effects of climate change on biodiversity and the measures that appear to be required to warrant the adaptation of species and habitats to climate change. Then, the provisions of the Habitats Directive relevant to these measures and their implementation in Finland as well as the need for legal reform will be assessed in chapter 3. Chapter 4 presents the concluding remarks.

2 Measures needed for biodiversity adaptation and relevant provisions of the Habitats Directive

Biological diversity is expected to come under increasing stress, and a number of species are to become threatened with extinction on account of climate change. Organisms are affected by modifications in temperature, humidity and weather patterns as well as more frequently occurring extreme weather events associated with climate change. Many effects of climate change on species and ecosystems have already been documented, and in the future, climate change is expected to have increasingly serious consequences. Many species and ecosystems are expected to shift their distributions to higher latitudes and altitudes.

---

5 See among others Verschuuren 2010 (n 1), 431–439. Verschuuren has suggested making the wording of the Article 10 of the Habitats directive more compulsory. About the new EU-level legislation on adaptation to climate change see Cliquet et al (n. 1) 2009.

6 Trouwborst, 2011 (n 1).

7 Trouwborst, 2011 (n 1), 62.

8 For example the Article 10 of the Habitats Directive proclaims in vary general terms that Member States shall endeavour, where they consider it necessary, in their land-use planning and development policies and, in particular, with a view to improving the ecological coherence of the Natura 2000-network, to encourage the management of features of the landscape which are of major importance for wild fauna and flora.

9 See Verschuuren 2010 (n 1), 437.

10 Trouwborst 2011 (n 1), 71.


12 Secretariat of the Convention on Biological Diversity, Interlinkages between biological diversity and climate
In Finland, the predictions suggest that temperatures could increase by 2.4 to 7.4°C by the year 2080 compared to the conditions of the late 1990s. Such rapid and significant warming would seriously challenge the ability of Finland’s native species to adapt to changes in their environment. In addition to increased temperature, changes in precipitation levels represent another significant factor affecting species. It has been forecast that annual precipitation levels in Finland could increase by 6 to 37 per cent by 2080.13

Natural ranges of some species are already evidently changing in Finland. Changes in the climate most clearly affect the distributions of species that are highly mobile, such as birds and butterflies. For instance, many new butterfly and moth species have spread into southern Finland from the south and the southwest since the second half of the 20th century. Meanwhile, many species whose ranges were previously limited to southern Finland have been spreading to the north and the northeast. If temperatures continue to rise, some species found today in northern Finland will inevitably decline in number as their habitats shrink. Some species could even disappear from Finland altogether.14

As it is inevitable that climate will change in the future decades, regardless of mitigation actions to reduce the greenhouse gas emissions, there is a growing need to increase the adaptive capacity of the species and habitats.15 Several policy documents and literature on conservation biology have proposed a number of measures needed to increase the resilience and adaptive capacity of species and ecosystems. These measures include protecting and restoring large robust natural areas, ensuring connectivity between those areas, increasing the resilience of species and ecosystems to changing conditions, and in some cases, undertaking active translocation of populations to climatically more suitable areas.16

To some extent, the Habitats Directive contains provisions relevant to all of these measures.17 This article concentrates on those provisions of the Habitats Directive that are relevant for increasing the connectivity between protected areas, ecosystem restoration and assisted migration. These measures have been chosen because in previous publications those issues have been assessed to be the most controversial under the Habitats Directive. As there are a number of scientific articles devoted to assessing the provisions of the Habitats Directive in the light of climate change,18 here the focus is more on national level implementation.

15 See e.g. Commission communication of 1 April 2009 on Adapting to climate change: Towards a European Framework for Action, Communication (COM) 2009, Convention on Biological Diversity (Rio de Janeiro, 5 June 1992) COP decision IX/16 on Biodiversity and climate change (30.5.2008), COP decision VII/28 on Protected areas (20.8.2004), COP Decision X/2 The Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Target.

17 For comprehensive analysis of the relevant provisions see Trouwborst 2011 (n 1).  
18 See e.g. Cliguet et al 2009 (n 1), Verschuuren 2009 (n 1), Trouwborst 2011 (n 1).
3 Implementation of the Habitats Directive in Finland

3.1 Restoration of habitats and populations

One of the key strategies that have been suggested in enhancing the adaptive capacity of species and habitats is the restoration of degraded ecosystems and ecosystem functions. The most widely accepted definition of ecological restoration at present is the following: Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. Thus, the word restoration can be used to cover all activities aimed at restoring habitats (including the reintroduction of species) as well as active nature conservation measures, mitigation, and compensation.

As Verschuuren has pointed out, the demerit of the Habitats Directive is the lack of specificity regarding restoration. However, it can be argued that in general terms the conservation, and if needed, also the restoration of climate change resilient habitat and populations must already be considered compulsory under the directive. Trouwborst sees that the obligation for restoration of ecosystems can be derived from Articles 6(1) and 6(2) of the Habitats Directive that require member states to establish the necessary conservation measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites. The same Articles also require the member states to take appropriate steps to avoid the deterioration of natural habitats and the habitats of species in the special areas of conservation.

Trouwborst argues that these provisions must be deemed to require conservation and/or restoration measures aimed at securing the resilience of species and habitats to climate change impacts. As Verschuuren and Trouwborst have previously concluded, restoration is evidently one of the targets of the Habitats Directive, yet the provisions refer only vaguely to restoration measures. To compare, in the field of water protection, which is clearly also relevant for biodiversity adaptation to climate change, the obligation for restoration has been formulated in a legally binding way in Water Framework Directive.

Also in Finland the regulation on restoration of the ecosystems is mostly developed in the field of water management, whereas in nature conservation, the restoration of protected areas is well established, yet, largely unregulated conservation practice. In Finnish Nature Conservation Act (1096/1996) there are no provisions regarding the restoration of habitats or ecosystems. Only the section 69 which implements the Habitats Directive Article 6 (4) and requires compensatory measures if the ecological value of Natura 2000 site is deteriorated, could be regarded as restoration provision. According to the Commission guidance document, the compensatory measures appropriate to adverse effects on Natura 2000 sites consists of restoring the habitat to ensure the maintenance of its conservation value and compliance with the conservation objectives of the site; creating a new habitat on a new site or environmental value.

---

19 COP Decision X/33 on Biodiversity and Climate Change (29 October 2010), para. 8(c)-(e).
21 Verschuuren 2010 (n 1), 436.
22 Trouwborst 2011 (n 1), 17.
23 Trouwborst 2011 (n 1), 17–18.
24 See Verschuuren 2010 (n 2), 437 and Trouwborst 2011 (n 1), 17-18.
25 Directive of the European Parliament and of the Council (EC) 60/2000 Establishing a framework for community action in the field of water policy. The obligation for restoration can be found already in the objectives of the Water Framework Directive, where it is stated that Member States shall protect, enhance and restore all bodies of surface water (Article 4 1 (a) (ii)), and Member States shall protect, enhance and restore all bodies of groundwater (Article 4 1 (b) (ii)).
through the enlargement of the existing site or creation of new habitats; improving the remaining habitat proportional to that which is lost due to the project or plan; or measures to prevent further erosion of the coherence of the Natura 2000 network. The problem in implementation of the Article 6 (4) in Finland, however, is that the responsibility for compensatory measures is left for the state authorities (Ministry of Environment), which contradicts the polluter pays-principle. It should also be noticed that this provision has not been applied in Finland as of yet, and thus the effect of this provision in regards of climate change adaptation is not likely to be significant.

Regardless of the lack of restoration provisions in Nature conservation act, ecological restoration is a commonly used nature conservation practice in state-owned protected areas. Metsähallitus (Finnish Forest and Park Service) is responsible for the management of the state-owned protected areas, and restoration work in protected areas has been carried out for about a decade, on the contrary to private lands, where the restoration has not been as systematic. The Forest Biodiversity Programme for Southern Finland (METSO) has improved the situation to some degree, as it has made financing available for private land owners to carry out restoration practices in forest habitats (Act on the Financing of Sustainable Forestry 1094/1996).

In order to contribute to biodiversity adaptation to climate change by enhancing the restoration of the ecosystems in privately owned protected areas and outside the protected areas, a stronger emphasis on obligations for active conservation measures or financial incentives for restoration practice should be established into the legislation. Climate change adaptation seems to challenge the current nature conservation regimes, which are still mainly based on passive restrictions and classical legal bans. The problem is that traditionally it has not been considered feasible to place active legal obligations for land owners to take nature conservation measures. Nonetheless, there are some legal norms that already require the active use of the private property. A good example is the obligation to regenerate forest after felling under the Finnish Forest Act (1093/1996). One way forward could be the introduction of the general requirement for ecological compensation into the Nature Conservation Act, which would apply also in those cases where the Article 6 (4) of the Habitats Directive doesn’t apply. Additional conservation actions, which could consist of both on-site and off-site measures, would be required when a project negatively affects the protected natural values. The required conservation measures could be targeted for climatically sensitive areas to promote the biodiversity adaptation to climate change.

Finland is not alone in its way of implementing the Habitats Directive provisions regarding restoration. As Verschuuren has pointed out, there is no indication that any of the EU member states have adopted a robust restoration policy when implementing the Habitats Directive. As restoration is seen as a key measure in biodiver-

---

26 Assessment of plans and projects significantly affecting Natura 2000 sites Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission 2001.
29 See more about the Metso-programme section 3.2 of this article, and Hiedanpää, Juha: The edges of conflict and consensus: A case for creativity in regional forest policy in Southwest Finland. Ecological Economics 55/2005.
30 Suvantola ja Similä 2011 (n 26), 359.
31 The introduction of the requirement for the ecological compensation has been suggested several times before. See e.g. Suvantola and Similä 2011 (n 26), 259.
32 Verschuuren 2010 (n 1), 437.
sity adaptation to climate change, it would deserve a more central place in the European and national environmental law. Thus, it would be reasonable to make amendments to the Natura 2000 scheme that would require member states to develop robust restoration plans that will help nature adapt to a changing climate. This would also be in line with the requirements under the Water Framework Directive.

Regardless, the implications of climate change for the broader practice of ecological restoration should be considered before making any amendments to the Directive. As Harris et al. have pointed out, in particular, the usefulness of historical ecosystem conditions as targets and references must be set against the likelihood that restoring the historic ecosystems is unlikely to be easy, or even possible, in the changed biophysical conditions of the future. Thus, more consideration and debate needs to be directed at the implications of climate change for restoration practice before any legislation is prepared. Josefsson and Baaner have also suggested in their analysis of the Water Framework Directive that the whole concept of restoration would be replaced by the idea of rehabilitation. As they point out, the ambition of establishing the reference conditions based on pristine states is controversial because many variables of the ecosystem conditions have fundamentally changed, owing to climate change, invasive alien species and changed landscape, when compared to historic states.

The issue of ecological restoration thus reveals a fundamental problem in the nature conservation regimes in the era of climate change:

33 Harris et al 2006 (n 19), 170–176.
36 Josefsson – Baaner 2011 (n 34), 467.

the reference point for conservation measures needs to be redefined, so that instead of looking to the past, we must start looking toward the transition to the future. The challenge for legal regimes is not to lack behind the development in scientific understanding and changes in natural systems.

3.2 Promoting the dispersal of species – Connectivity between protected areas

The provisions regarding the Natura 2000 network are probably the most significant in climate change adaptation, as there appears to be substantial agreement in the scientific literature that successful adaptation of biodiversity to climate change requires the establishment and management of protected area networks at the largest possible scale with extensive core areas and adequate connectivity. The Habitats Directive obligates member states to create a coherent ecological network, Natura 2000 (Article 3 (a)). The network has a key role in halting biodiversity loss due to climate change, as large and robust protected areas enhance the resilience of species and habitats. However, in order to help species adapt to climate change by promoting their dispersal (i.e. facilitating their movement between current and

37 See also Ruhl, J.B.: Climate change adaptation and structural transformation of environmental law. Environmental law 23/2010, 393.
39 Cliquet et al. 2009 (n 1), 162.
future habitats), measures are needed outside the protected areas. The key issue in facilitating the movement is to increase the connectivity between protected areas. Connectivity can be increased in number of ways, including the creation of wildlife-friendly corridors or stepping stones.40

The requirements for the connectivity of the Natura 2000 are addressed in Article 3 (3) and Article 10 of the Habitats Directive. Article 10 states that member states shall endeavor, where they consider it necessary, in their land-use planning and development policies to encourage the management of features of the landscape which are of major importance for wild fauna and flora with a view to improving the ecological coherence of the Natura 2000 network. The Article continues that such features are those essential for the migration, dispersal and genetic exchange of wild species by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems for marking field boundaries) or their function as stepping stones (such as ponds or small woods). Even though the provisions are put rather weakly using impressions like “shall endeavor” and “where they consider necessary”,41 it is evident that the Directive provides a legal basis for connectivity, and if well implemented Natura 2000 provisions provide good bases for climate change adaptation measures.

In Finland, however, there are number of problems related to the implementation of the Natura 2000 network. First, Article 6 (2) of the habitats directive has not been implemented adequately.42 Sections 65–66 of the Finnish Nature Conservation Act implements the Article 6 of the habitats directive, but those provisions don’t contain either an explicit ban for deterioration of the natural values, or an obligation to conduct positive conservation measures in Natura -2000 sites. Instead, section 65 only refers to the obligation to assess a project or a plan, which is likely to have significant adverse effect on the ecological value of a site included in, or proposed by the Government for inclusion in, the Natura 2000 network. Section 65 then continues, that no authority is empowered to grant a permit for the implementation of a project, or to adopt or ratify a plan, if the assessment procedure or the requested opinion referred to in section 65, paragraphs 1 and 2, indicates that the project or plan would have a significant adverse impact on the particular ecological value for the protection of which the site has been included in, or is intended for inclusion in, the Natura 2000 network. The problem is that the control mechanism is based on the authority decisions, even though the obligation to conduct an assessment is general. This means that a plan or a project, which doesn’t require an authority decision, can be conducted even if it deteriorates the natural values of the Natura 2000 site.43

Secondly the issue of connectivity has not been explicitly addressed in the Nature conservation Act. Only the section 69 that implements Article 6 (4) of the Habitats Directive refers to the overall coherence of the network. Also the recently published evaluation report on the Finnish nature conservation legislation stated that the obvious demerit of the Finnish nature conserva-
tion act is the lack of effective means to enhance the connectivity between the protected areas.\textsuperscript{44}

It has already been suggested that the connectivity between protected areas should be added to the aims of the Act in Section 1.\textsuperscript{45} However, it is questionable whether that would be sufficient, as often the target provisions are considered not to be legally binding in a same way as other provisions.\textsuperscript{46} In addition, it is evident that the issue of connectivity cannot be addressed just by nature conservation legislation. This means that the land use planning is likely to play a key role in future nature conservation. Also the regulation on agricultural and forest activities should take into account the need to increase the connectivity. For example, the agricultural subsidy-schemes should include the criteria for the connectivity, and financial incentives to create ecological corridors or stepping stones in agricultural and forestry lands should be established.

The lack of effective implementation of Articles 3 (3) and 10 of the Habitats Directive in Finland, as well as in other member states,\textsuperscript{47} indicates that changes in the language of the Directive, as Verschuuren had suggested,\textsuperscript{48} or at least guidance by the Commission on the implementation of those provisions is needed in order for member states to take adequate measures to increase the connectivity. The issue should not be left for member states to voluntarily conduct, as coordination between the member states is presumably necessary in order to create a coherent green infrastructure in Europe to help species and habitats adapt to climate change.

In addition, the problem is the rather static character of the Habitats Directive. For instance, the criteria on which areas are designated as Special Areas of Conservation (SACs), which are laid down in Annex III of the Directive, are mainly linked to the existing values (habitats and species) at the moment of designation. When designated, ‘deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated’ must not occur (Article 6(2) Habitats Directive).\textsuperscript{49} Apparently, these provisions do not take into account the possible need for species to migrate into climatically more suitable areas.

Problematic is also the process of designation of the sites which is usually time-consuming.\textsuperscript{50} In the light of climate change adaptation, a more flexible approach for designation and management of the protected areas is needed. For instance, in order to ensure the species’ ability to migrate to climatically more suitable areas, the use of short-term contracts for protecting privately owned areas could be used as a cost-effective and less time-consuming instrument for promoting the dispersal of species. Once the migration is over, the agreements could be revoked.\textsuperscript{51}

One example of the regulatory instrument that could be useful in helping nature to adapt to climate change could be the natural values trad-

\textsuperscript{44} Similä et al 2010 (n 41), 65.
\textsuperscript{45} Suvantola and Similä 2011 (n 26), 136–137.
\textsuperscript{46} Määttä, Tapio: Lainsäätäjän kunnioittamisasenne, tavoitteellinen laintulkinta ja lakien tavoitesäännökset vallitsevassa tuomarideologiassa. In Pakarinen, Aigi et al. (eds.): Lainvalmistelu, tutkimus, Yhteiskunta. Jyrki Talan Juhlakirja. 2011, 208.
\textsuperscript{47} Cliguet et al 2009 (n 1), 171.
\textsuperscript{48} Verschuuren 2010 (n 1).
\textsuperscript{49} Cliguet et al 2009 (n 1), 163.
\textsuperscript{50} For instance in Finland the designation of the protected sites has been severely congested since 1990’s. In Finland the protected areas are established in different way depending whether the area is state-owned or privately owned. The recently published report on the Nature Conservation Act showed that on one hand there is very long time gap between the land acquisition and the establishment of the protected areas in state-owned lands. On the other hand the protected areas in privately owned land were seen as an unsatisfactory compromise of the protection provisions between the land-owner and the officials. Similä et al 2010 (n 41), 48.
\textsuperscript{51} Cliguet et al. 2009 (n 1), 163.
ing scheme that was successfully tested under the METSO I programme in Southern Finland during 2003–2007. Since then the scheme has been revised, but the core elements of the scheme remained the same.\textsuperscript{52} Natural values’ trading means that, in certain ecologically valuable areas, forest owners have the choice between producing natural values or timber. The core of the approach is that this choice by forest owners is a voluntary one. Conservation under the scheme is based on forest owners’ competitive tendering. Authorities compare tenders and choose the most suitable sites that meet the biological criteria and negotiate conservation agreements with the forest owners. Once the site is approved as a conservation site, the forest owner will be compensated for the costs of nature management on the site and for loss of income.\textsuperscript{53}

Forest owners have valued the voluntary approach to nature conservation and appreciated the independent decision-making and the chance to retain their property rights. Conservation agreements can be either permanent or they can be made for a specific time period according to the forest owner’s preference. At the moment the natural values trading scheme applies only to wooded habitats, however, as it has proved to be successful,\textsuperscript{54} it could be used as a model for regulatory design in conservation of other habitats as well.

The problem of the voluntary schemes is how to make sure that the most suitable areas for climate change adaptation are protected. However, while nothing guarantees that landowners are willing to participate or that the ecologically most valuable areas are offered for conservation, there are encouraging studies conducted, which indicate the potential effectiveness of voluntary conservation schemes.\textsuperscript{55}

3.3 Assisted migration
The most controversial strategy that has been suggested by scientists to help nature adapt to the effects of climate change is “assisted migration”, alternatively called as “assisted colonization” or “managed relocation”.\textsuperscript{56} Assisted migration is defined as the intentional transfer of flora or fauna to a new region in response to climatic change.\textsuperscript{57} In other words, assisted migration involves the deliberate movement of species to new, climatically more suitable areas where they have not existed before. This new form of translocation of species implicates the fundamental effects that climate change might have on nature conservation.\textsuperscript{58} So far the active translocations have been carried out to introduce species to their historical ranges. Now the idea is to introduce species to areas where they have not lived before. However, the use of assisted migration seems to be in conflict with the prevention of the spread of invasive alien species, on the contrary to the


\textsuperscript{53} See Hietanen 2005 (n 25). Basically the scheme is more comparable to traditional state aid than actual market based instrument. See Similä – Kokko 2009 (n 51), 103. EU commission has stated that the trading scheme should be according state aid regulations of the Treaty on the Functioning of the European Union. This is problematic in a sense that state cannot offer any more than full compensation even for those sites which would be highly valuable for nature conservation purposes. European Commission C(2008)460/2, Brussels, 13 II 2008.

\textsuperscript{54} See Hietanen 2005 (n 28).


\textsuperscript{57} See Hoegh-Guldberg et al. 2008 (n 55), 345.

protection of native species which has traditionally been the central issue in nature conservation.

In scientific literature a number of arguments have been presented for and against the use of assisted migration. On one hand, it has been argued that under some circumstances assisted migration would be viable and more appropriate than conventional or passive conservation methods (such as establishing migration corridors). A group of scientists asserted in an article in Science that the use of assisted migration could be a viable conservation tool in situations where: (1) there is a high risk of extinction to a particular species; (2) it is technically feasible for scientists or managers to translocate and successfully establish a population of such species; and (3) there is a sufficiently low risk of adverse outcomes to the location (and to the ecosystem and constituent species therein) targeted to receive the newly introduced organisms. The scientists claimed that these situations could presumably be identified, and they proposed a decision framework flow chart to determine whether assisted migration would be viable. The proponents of assisted migration also referred to the successful experiments where species have been translocated into areas where they have not existed before.

On the other hand, skeptics have presented a number of uncertainties that might prevent assisted migration from being a scientifically viable conservation strategy. The concerns are economic, ecological, ethical and legal. Firstly, it has been assessed that the administrative costs are likely to be quite high (the costs include planning, implementation, and long-term monitoring). Secondly, there is a concern of a possible harm to the rare species itself that is translocated; as such a species is likely to be less able to endure the loss of even a few members to a failed introduction effort. Moreover, there are serious concerns about the risks of harm to the ecosystems to which species are introduced. Thirdly, the ethical issues relate to long-term human manipulation and the control over nature, which can run counter to traditional conservation ideals that aim to allow natural systems to function apart from human interference. Finally, there is a question concerning the legal feasibility of the use of assisted migration.

In legal perspective, the use of assisted migration is relatively complex as in some cases it might contradict the provisions for prevention of the spread of non-native species. The Habitats Directive requires member states to ‘ensure that the deliberate introduction into the wild of any species which is not native to their territory is regulated so as not to prejudice natural habitats within their natural range or the wild native fauna and flora and, if they consider it necessary, prohibit such introduction’ (Article 22 (b). As such, the directive does not appear to be standing in the way of assisted migration, yet it requires that the potential consequences are carefully assessed in advance on a case-by-case basis. The problem is to find a balance between the protection of the endangered species that cannot migrate on their own, and the protection of the native species in ecosystems the endangered ones could be translocated into. In the case

---

59 See summary of arguments for and against the use of assisted migration in Camacho 2009 (n 57), 183–185.
60 See Hoegh-Guldberg et al 2008 (n 55).
61 Hoegh-Guldberg et al. 2008 (n 55), 345.

63 More about the controversies on assisted migration see Camacho 2009 (n 57).
64 Trouwborst 2011 (n 1), 19.
of species listed in appendix IV (a) and (b) of the Directive, Articles 12 and 13 are relevant as they prohibit all forms of deliberate capture or killing of specimens of these species in the wild (Article 12 1 (a)), and as they forbid the keeping, transport and sale or exchange and offering for sale or the exchange of specimens of such species taken in the wild (Article 13 1 (b). Thus, the conditions under Article 16 of the Directive need to be met before those species can be translocated.

In Finland, the Nature Conservation Act seems to be stricter than the wording of the Habitats Directive in terms of translocations. According to the Section 43 of the Nature conservation Act, non-native species are not to be released into the wild if there is cause to suspect that the species may become established permanently. In addition, non-native plant species without an established range in the Finnish wild are not to be planted or sown outside a garden, a field or another site designated for special purposes, nor in natural waters, in so far as there is cause to suspect that the species may become established permanently. The recent case in Turku administrative court indicates the potential conflict between the current conservation legislation and the conservation measures needed for climate change adaptation. The court ruled that the assessment whether the species is native or not needs to be based on its biological range. Thus, the barnacle goose (Branta leucopsis), while being native in Finnish nature, was not to be translocated into areas outside its natural range in northern Finland.65

This case indicates well the incongruity between assisted migration and the conventional nature conservation law. As climate change proceeds, the whole framework and the objectives of nature conservation need to be transformed to better manage dynamic and uncertain natural world. As Camacho has pointed out, arguments based on a normative commitment to keeping natural systems wild and uncontrolled lack persuasive power, particularly in the era of climate change.66

As the Habitats Directive seems to allow the use of assisted migration, under certain circumstances, it can be argued that the further regulation of assisted migration could be left for the member states, if they see it normatively desirable. Nonetheless, as the case may well be that translocations need to cross the borders of the member states; there might be need for EU level regulations on assisted migration. If it turns out that a comprehensive use of translocations are needed in order to protect the species, then the regulation should be coordinated at the EU level. At the moment the case could be that member states might prevent the use of assisted migration by appealing to the Habitats Directive. Furthermore, as was already pointed out, the issue of assisted migration also reveals the more fundamental problems in the nature conservation regimes, and it would be advisable to solve the problems at the EU level to make sure that we will have a comprehensive, coherent and effective nature conservation regime to facilitate the adaptation of species to climate change.

4 Conclusions

In this article, the implementation of the Habitats Directive in Finland has been analyzed from the perspectives of three climate change adaptation measures (restoration of ecosystems and habitats, increasing the connectivity between protected areas and assisted migration) that have been suggested in several scientific texts and political

65 Judgement 7.1.2011(Record number 02309/09/5402).
66 Camacho (n 57), 225.
documents. In previous scientific articles it has been argued that the Habitats Directive provides a basis for these adaptation measures.\textsuperscript{67} Clearly the Habitats Directive enables member states to conduct these measures. However, this analysis indicates that those provisions which are relevant for adaptation measures have not been effectively implemented at the member state level, at least not in the case of Finland. In addition, there are indications of incongruence between the needed adaptation measures and the current regulation. Thus, at the minimum, guidance by the commission and jurisprudence by the European Court of Justice are needed in order for member states to adequately address the issue of adaptation, as Trouwborst has previously concluded.\textsuperscript{68}

This analysis also revealed the more fundamental problems in current nature conservation regimes in the European Union and in Finland. Both the objectives and the whole framework of the nature conservation should be adjusted to better manage the dynamic and uncertain natural systems. The current regimes, that rely on passive restrictions and legal bans and that aim at preserving the historical and native nature, should be replaced by flexible, dynamic, and more active conservation management that takes into account the future transition. Thus, it is reasonable to ask whether this more fundamental transformation that seems to be needed as climate change proceeds would be better addressed at the EU level.

\textsuperscript{67} See e.g. Verschuuren 2009 (n 1), Trouwborst 2010 (n 1).

\textsuperscript{68} Trouwborst 2010 (n 1).
Climate Change Liability – Variations on Themes Across the Atlantic

Robert Utter

Abstract
In recent years the United States Supreme Court has delivered two significant rulings, Massachusetts v. EPA and AEP v. Connecticut, concerning regulating and limiting greenhouse gas emissions. Since federal climate change legislation has stalled in Congress, these two rulings are all the more significant in setting the stage for how greenhouse gas emissions are regulated in the United States. According to the rulings, greenhouse gas emissions are covered by the Clean Air Act and thus fall under the regulatory jurisdiction of the Environmental Protection Agency. This in effect cancels the possibility for private enforcement of emission limits on greenhouse gases under federal nuisance law. No similar groundbreaking precedents have been issued by the high courts in Finland. But in contrast with U.S law, it seems that greenhouse gas emissions would not be covered by the Finnish Environmental Protection Act and thus a plaintiff could under Finnish nuisance law pursue an injunction case against an emitter of greenhouse gases. Likewise, a plaintiff could file a claim for damages under the Finnish Act on Compensation for Environmental Damage. In practice, however, a plaintiff’s injunction case as well as tort liability case seems to be doomed for failure under Finnish law. Requirements set by the burden of proof and causality, among others, mean that Finnish nuisance and tort law are far from being effective means of enforcement or redress in the context of climate change liability.

1 Introduction
This paper sets out to examine certain key issues when assessing remedies available for a plaintiff (be it a natural person, corporation or other) in case of nuisance, damage, or loss that has allegedly been caused by a defendant’s greenhouse gas emissions, i.e. the fact that the defendant has, at least to some extent, contributed to climate change. Legislative options, public policy enforcement or administrative law is beyond the scope of this paper. Thus the possibility of authorities to enforce actions against polluters is not as such directly examined. However, as will be evident below, the jurisdiction of the authorities does play a role in setting the boundaries for private action.

A further delimitation of the scope of this paper is the jurisdiction that is examined. The purpose of this paper is to take a closer look at applicable Finnish law when it comes to redress against emissions of greenhouse gases. This examination is carried out in the light of key case law of the U.S. Supreme Court on the subject matter. The issue of climate change liability or the authority to regulate greenhouse gas emissions under pollution abatement legislation or environmental protection legislation has been the subject of two rulings of the U.S. Supreme Court, Massachusetts v. EPA and AEP v. Connecticut.
3 Similar issues have not ended up on the dockets of the Finnish Supreme Court or the Finnish Supreme Administrative Court, which means that legal precedents are lacking in the jurisdiction more familiar to the author of this paper. Therefore there is certainly room for taking a closer look at what might be the likely outcome of hypothetical cases in Finland, how issues could be approached by Finnish courts, as well as what factors would most probably be taken into account if cases of the same nature as those before the U.S. Supreme Court were to end up before Finnish courts. For the sake of clarity, it can be noted that U.S. law is not as such used for the purpose of recommending any changes in the Finnish legal system, nor is any thorough comparative analysis on U.S. law carried out in this paper.

The following discussion in this paper will be divided into two structural parts. First, the possibility of obtaining an injunction will be discussed. Injunctions are discussed in the context of both Finnish private and to some extent also public nuisance law, but as for the latter only in the context of the possibility of an individual, i.e. not the public authority, to gain an injunction against a defendant. Second, the issue of claims for damages under tort law will be discussed, but as for Finnish law the discussion is mostly limited to the Act on Compensation for Environmental Damage, which would probably be the likely option for a plaintiff to try and base his or her case. These two themes are intertwined as will be evident from the discussion below, but for the sake of clarity it is better to keep them apart.

2 Injunction

2.1 Are greenhouse gases pollutants?

During the late 1990s and lasting for approximately one decade a legal debate over whether carbon dioxide or other greenhouse gases were air pollutants within the meaning of the Clean Air Act (“CAA”) moved back and forth in the U.S. Under the CAA the Environmental Protection Agency (“EPA”) has regulatory authority over air pollutants. Thus answering the question was vital with regard to jurisdiction over climate change mitigation under federal law in force in the U.S. During President Clinton’s administration the EPA held the view that greenhouse gases were indeed air pollutants. However, in 2001 the newly appointed General Counsel of the EPA, Robert Fabricant, issued an opinion that this conclusion was no longer considered as correct. Fabricant argued that the EPA lacked authority to regulate greenhouse gas emissions under the CAA. This interpretation was contested in court and the case went all the way to the U.S. Supreme Court. In Massachusetts v. EPA the Supreme Court indeed found that greenhouse gases are air pollutants within the context of the CAA and that the EPA has regulatory authority over such emissions.

As in the U.S. a similar question regarding Finnish environmental legislation could be raised regarding whether greenhouse gas emissions should be regarded as pollutants or not. Activities that could cause environmental pollution are as a rule under the regulatory scheme of the Finnish Environmental Protection Act, which would probably be the likely option for a plaintiff to try and base his or her case. These two themes are intertwined as will be evident from the discussion below, but for the sake of clarity it is better to keep them apart.

6 Act 4.2.2000/86.
Environmental Protection Act pollution refers to, *inter alia*, emissions that, among others, cause harm to health or to nature and its functioning, decrease the general amenity of the environment or degenerates special cultural values, or cause damage or harm property or its use. If the definition of pollution is not met as for a certain activity, the authorities have limited powers to take enforcement actions against the activity under the Environmental Protection Act.

Standard practice of Finnish environmental authorities has been that greenhouse gas emissions are generally not considered as pollutants based on their effects on global warming or climate change alone. A Government Bill concerning an amendment to the Finnish Environmental Protection Act takes note of this administrative practice and also states that the purpose of the Act is not to set emission limit values on greenhouse gas emissions.7 It has also been pointed out that considering climate change impacts to be pollution impacts, within the context of the Environmental Protection Act, would be stretching the boundaries of the Act too far.8 Therefore the conclusion would be that emissions contributing to climate change are not pollution in the context of the Finnish Environmental Protection Act.

Another issue to be taken into account is that the Finnish legal situation differs from the one in the U.S. as for one further aspect. The EU Emissions Trading Scheme (EU ETS), which is set up under the Emissions Trading Directive (2003/87/EC), includes a provision on the permissibility of limiting greenhouse gas emissions, which are included in the EU ETS. Under Article 26 of the said Directive an "environmental permit shall not include an emission limit value for direct emissions of [such greenhouse gas emissions] unless it is necessary to ensure that no significant local pollution is caused". Similarly the Finnish Environmental Protection Act includes an explicit ban on setting emission limit values on greenhouse gas emissions under the same circumstances and exceptions. Thus Finland could under EU law as a rule only regulate greenhouse gas emissions in the non-EU ETS sectors unless Article 193 of the Treaty on the Functioning of the European Union would be evoked.

2.2 Displacement of nuisance law

Even though the U.S. and Finnish legal systems are very different in many respects, the answer to the question of administrative authority over greenhouse gas emissions is crucial in both systems in respect of remedies against environmental nuisance. This is due to the fact that in both legal systems administrative authority precludes an injunction based on nuisance. An interesting comparative point in this regard is the combined effect of the *Massachusetts v. EPA* and *AEP v. Connecticut* rulings. In *AEP v. Connecticut* the original plaintiffs (who were respondents before the Supreme Court) had sought an injunction to cap and subsequently reduce the emissions of five defendants that emitted CO₂ from their installations.

The U.S. Supreme Court had previously found that the EPA had been delegated by Congress with the authority to regulate greenhouse gas emissions (*Massachusetts v. EPA*). This in effect displaced the application of federal common law on nuisance (*AEP v. Connecticut*). As noted by Adler, prevailing in one of the two mentioned cases ultimately meant defeat in the other as the cases in this sense extinguished each other.9


The ruling in \textit{AEP v. Connecticut} bars a claimant from being able to successfully sue a defendant and receive a ruling by a court of law that would set limits on the defendant’s greenhouse gas emissions based on federal common law on nuisance. In Finland the same outcome follows from statutory law. According to Section 19 of the Finnish Act on Neighbor Relations\footnote{Act 13.2.1920/26.} a court cannot grant an injunction against an operation that requires a permit or notification under the Finnish Environmental Protection Act. The practical difference between the U.S. and Finnish legal systems in this respect is that there is so far no similar Finnish precedent regarding the authority to regulate greenhouse gas emissions as is the case with \textit{Massachusetts v. EPA} in the U.S. However, Finnish administrative practice is the opposite to \textit{Massachusetts v. EPA} and thus environmental authorities do not have authority to regulate greenhouse gas emissions. Therefore the door for nuisance law seems to remain open in the Finnish context.

Despite of the above, the issue in the Finnish context is unfortunately rather muddled, since a permit under the Finnish Environmental Protection Act is not only required for activities causing pollution (within the definition of the Act) but also for activities causing nuisance as defined in the Finnish Act on Neighbor Relations. Thus one seems to end up in a somewhat irritating chain of argumentation. First, greenhouse gas emissions are not pollution under the definition of the Environmental Protection Act and thus beyond the general scope of the Act. Second, if greenhouse gas emissions cause nuisance, an environmental permit under the Environmental Protection Act is required. And third, if an environmental permit is required, a plaintiff cannot be granted relief against the nuisance under the Act on Neighbor Relations. In this case it could be argued that the general applicability of the Finnish Environmental Protection Act, i.e. its link to the legal definition of pollution takes precedent. Since greenhouse gas emissions are not pollution under the act an environmental permit would not be required if above mentioned nuisance is caused as a result of greenhouse gas emissions contributing to climate change. This conclusion is also supported by the Government Bill of the Act although the issue is not commented upon explicitly.\footnote{Government Bill HE 84/1999, p. 56–57 and 122.} Thus Finnish nuisance law would seem to be available for a plaintiff regarding climate change induced nuisance. However, this would just be the first step in a plaintiff’s case, taking him or her beyond the question of admissibility before a court of law. It is a different matter to obtain a successful main ruling in such a case.

At this point it can be further noted that even though the availability of Finnish nuisance law would be lacking for plaintiffs, this would not mean that they would lack a legal remedy against polluters. Under Section 92 of the Environmental Protection Act a plaintiff with standing or the local municipality may petition the environmental authorities to take enforcement action against an emitter allegedly causing nuisance that is illegal under the Finnish Environmental Protection Act. In case of illegality, the authorities would be required to take action against the party causing the nuisance. Thus a plaintiff would seem to have procedural avenues for an injunction irrespective of whether alleged nuisance caused by greenhouse gas emissions are regarded as falling under the scope of the Finnish Environmental Protection Act or the Finnish Act on Neighbor Relations.

The procedural remedies provided by the Finnish Act on Neighbor Relations are to my un-
derstanding rather seldom used today, at least independently. This is due to the fact that the Finnish Environmental Protection Act and its definition on pollution cover many of the different variants of nuisance, meaning that environmental permitting has largely taken over as a tool for controlling nuisance. Furthermore, the Finnish Act on Compensation for Environmental Damage applies to claims for damages concerning environmental damage and damage claims nowadays fall under the scope of the latter act.

Under Section 17 of the Act on Neighbor Relations it is unlawful to use a real estate or property in a manner that causes unreasonable nuisance to a neighbor or close-by real estate. The unreasonableness is evaluated based on, among others, local circumstances, the commonness, strength and duration of the nuisance as well as the commencement of the nuisance. A successful injunction case would most likely boil down to the issue of proof. A plaintiff needs to show that the defendant’s action or inaction is causing nuisance. Thus questions of burden of proof and causality as well as showing that an injunction against the defendant would bring relief (i.e. that the defendant is solely or to a sufficient degree responsible for the nuisance) would evidently be raised in a court case. Since these questions are very similar to the ones that would be raised in a tort law case, a further review of them is made below in connection with the arguments concerning tort law (sections 3.3 and 3.4).

As a preview to the following discussion it can be noted that a plaintiff would not face an easy task as for proving causality and guilt. This is further aggravated by the fact that the plaintiff would under the Act on Neighbor Relations need to sue a neighboring emitter or an emitter that is located close by. Even though what constitutes as being “close by” is not defined, it is clear that the defendant could not be located in another region. Therefore relief for a plaintiff would be based on the rather arbitrary factor of being located close by to the emitter.

As a last point regarding the division of powers between the Finnish Act on Neighbor Relations and the Environmental Protection Act one should take note that emissions are under many circumstances composed of not one uniform emission, but several mixed substances that are emitted due to industrial or other processes. For example burning fossil fuels causes also other emissions than greenhouse gas emissions. Other emissions, e.g. particles or SO\textsubscript{x}/NO\textsubscript{x}, are also reduced in case fossil fuel burning is reduced. It is thus possible to look at many greenhouse gas emission sources from a wider perspective and acknowledge that, all things being equal, harmful emissions would be reduced across the board if burning of fossil fuels would be curtailed. Plaintiffs thus hold a potential for arguing that a certain redress would not only alleviate their injury allegedly caused by greenhouse gas emissions and climate change, but also injury caused by other pollutants.\(^2\)

However, the Finnish system of divided powers as for injunctions makes the above-mentioned case a bit complicated from a procedural point of view that could effectively hamper the successful implementation of the above possibility. For example, an industrial installation could be operating under an environmental permit that would regulate other emissions except emissions of greenhouse gases. In such a case a plaintiff could end up in a procedurally two-tiered litigation consisting of 1) an injunction lawsuit under the Act on Neighbor Relations as for greenhouse gas emissions, and, 2) a petition under the Environmental Protection Act as for emissions

covered by the environmental permit. This two-tiered approach would naturally be avoided in case greenhouse gas emissions would be regarded as falling within the regulatory scheme of the Environmental Protection Act. Furthermore, the above-mentioned limits set by the Emissions Trading Directive regarding greenhouse gas emissions covered by the EU ETS should be borne in mind.

2.3 A matter for the courts or not?
Political questions should not be decided in courts but should in a democratic society rather be left to the elected branches. This is in a nutshell the so called political question doctrine that delimits the jurisdiction of courts in the United States. In *AEP v. Connecticut*¹³ the U.S. Supreme Court did, however, not directly address the issue whether climate change related litigation would fall within the scope of the political question doctrine, although the Court did consider regulatory action as preferable to court action.¹⁴

The necessity of making an initial policy determination indicates that a case is non-justiciable.¹⁵ In *AEP v. Connecticut* the lower court, i.e. the Court of Appeals, came to an explicit conclusion regarding non-justiciability and found that the plaintiffs’ case was justiciable.¹⁶

Although not identical, the Finnish system of division of competence between the courts and the executive or the legislature is in a way similar to the U.S. system. For example, the Finnish Supreme Administrative Court must instead of issuing a ruling on a matter refer the case to the Finnish Council of State (i.e. the government), if the issue concerns a non-justiciable question. What exactly falls within the realm of “non-justiciable” is of course debatable and in the end it is up to the Supreme Administrative Court to decide whether it has jurisdiction or not as there is no possibility of appealing the decision of the Court.

As it seems that a nuisance case in Finland should be pursued under the Finnish Act on Neighbor Relations instead of the Finnish Environmental Protection Act, jurisdiction over a court case would rest among the civil courts, not the administrative courts. Therefore ultimate power to rule on such a case is vested with the Finnish Supreme Court, which cannot refer a matter to the Finnish Council of State, but has to give a ruling on the matter (provided that the Supreme Court grants a leave of appeal). Thus the Finnish courts would probably try a nuisance case similar to *AEP v. Connecticut*. However, Finnish courts would not have unlimited powers either, since a fundamental cornerstone of the division of powers between different branches of a state’s functions call for Finnish courts to refrain from actions that would fall within the competence of the legislature. Therefore Finnish courts would not go beyond statutory law and legal precedents. Where exactly a boundary has been crossed in these respects is very much open to debate, and, without a precedent regarding climate change, conclusions presented in this paper need to be read accordingly.

---


3 Damages

3.1 Caught in the crossfire between private law and administrative law

In the case of injunctions it is evident from the above discussion that court enforced injunctions based on nuisance law can be heading for a collision course with regulatory measures, the adoption of which belongs to environmental authorities or the legislature. Under both U.S. federal nuisance law and Finnish nuisance law the regulatory system prevails, i.e. the regulatory authority of the Environmental Protection Agency in the U.S. and the enforcement authority of environmental authorities under the Environmental Protection Act in Finland.

But, also in the U.S. context it is unclear whether the above mentioned division of competence should categorically bar a plaintiff from seeking any relief under nuisance law. Despite of regulatory measures regarding, for example, emissions, a plaintiff may also have a desire to bring its particular injuries before a court and claim compensation for damage. AEP v. Connecticut did not directly answer whether this is possible, and as such the issue remains undecided by a U.S. Supreme Court ruling. However, the U.S. Supreme Court might well end up ruling on the matter in the future.

In Finland the lawfulness of an act or omission does not deny the possibility to be awarded compensation for damage under the Finnish Act on Compensation for Environmental Damage. Thus it would indeed seem that no procedural hurdle in this respect exists with regard to a claim for damages. On the contrary, it would seem that even if an injunction could be or would have been sought based on the Finnish Environmental Protection Act this would not create a procedural obstacle for a plaintiff to seek damages under Finnish law.

Under a recent ruling of the Finnish Supreme Court (KKO 2012:1) the court largely ignored the arguments of the defendant that claims for damages caused by contamination were unfounded since the assessment of liability for the same contamination under administrative law, i.e. the Finnish Environmental Protection Act, was still pending in the environmental authorities. This is in line with the above-mentioned view that administrative procedures and rulings do not automatically extinguish the possibility to seek damages. However, since the Finnish Supreme Court ruled in favor of the defendant on other grounds it could still be argued that the jurisdictional question under Finnish law would remain unsettled. This argument is not very convincing since it would have seemed more likely that the Supreme Court would have dismissed the plaintiff’s case on the defendant’s procedural arguments described above, if the court had found them to be persuasive.

Thus it is all the more interesting to take a look at the perhaps most pressing questions that a party would need to assess before going to court and claiming damages for climate change induced damage, or, respectively, in order to assess a party’s potential liability and likelihood of being sued for such damages.

3.2 Climate change liability for environmental damage according to Finnish law

Above it has been noted that whether greenhouse gas emissions qualify as pollution is significant for settling any dispute in relation to injunctions. EPA v. Massachusetts has settled the U.S. debate on the matter, but in the Finnish context the issue of whether greenhouse gas emissions constitute pollution or not has to be reviewed independent-

18 There are several cases pending in the lower courts regarding climate liability.
ly from the above-mentioned arguments concerning the definition of pollution in the Finnish Environmental Protection Act since liability for damages is not dependent on the said Act.

Finnish law recognizes a special form of damage, environmental damage, as for which certain particularities apply regarding, for example, burden of proof and other issues regarding, for example, allocation of liability. The Finnish Act on Compensation for Environmental Damage is applied if the damage caused qualifies as environmental damage. In order to qualify as environmental damage it is not the actual loss or damage that needs to be of a certain kind, but rather the manner in which the loss or damage arises.

In order for the Finnish Act on Compensation for Environmental Damage to be applicable, the following generalized three step test has to be satisfied: (1) an activity carried out in a certain area (2) causes a disturbance in the environment (as defined in the Act)19 (3) that in turn causes coverable loss or damage. If these three steps are satisfied, the definition of environmental damage is fulfilled and the Act is applicable. Of particular interest at this stage is to assess whether greenhouse gas emissions and caused climate change impacts would fulfill the criterion of “disturbance in the environment” as explicitly defined in the Act.

What constitutes pollution is not defined in the Finnish Act on Compensation for Environmental Damage. However, the term “pollution” in the context of the Act is independent of any definitions found in other pieces of legislation, e.g. the Finnish Environmental Protection Act. “Pollution” refers to basically any adverse change in the quality of the environment, regardless of it being physical, chemical or biological. Thus, for example, structural changes in water bodies could constitute “pollution” under the Act.20 The scope of what falls within the ambit of “pollution” should be construed rather broadly and should not be limited without good reason. However, it has been argued that changes in landscape or flooding of land would not fall within the scope of “pollution” in the context of the Act.21 Although the Act also covers damage caused by “other similar nuisance” it is unclear to what extent the scope of the Act can be broadened. What type and extent of similarity is required would need to be assessed case-by-case depending on the particular nuisance at hand.

Since “pollution” is not defined in the Act on Compensation for Environmental Damage, it is obvious that “air pollution” isn’t defined either. But, on the face of it, one cannot at least directly dismiss the argument of greenhouse gas emissions constituting air pollution within the meaning of the Act. Natural counter arguments would of course be that the legislator didn’t mention greenhouse gas emissions as a form of air pollution. Taking into account that the United Nations Framework Convention was signed in 1992, i.e. at the same time that the Act was being prepared, it could be argued that greenhouse gases would have at least been mentioned in the Government Bill, had the intention been to include such emissions as air pollution. However, the strength of such arguments is uncertain. What ends up in a Government Bill is by no means a conclusive statement of the legislator’s intentions. Another obvious argument against greenhouse gas emissions being “air pollution” would be that the chain of events from (i) greenhouse gas emissions to (ii) increasing the concentration of such gases

19 The Act covers the following “disturbances”: i) pollution of the water, air or soil; ii) noise, vibration, radiation, light, heat or smell; and iii) other similar nuisance.

in the atmosphere to (iii) in the end participating in causing climate change is not a “disturbance in the environment”22 since such an interpretation would stretch the scope of the Act too far from its wordings. However, the latter form of argumentation also begins to move in the direction of proving causation, which will be dealt with later.

Many of the effects (changing weather patterns, rising sea levels, migration of species) of climate change would not easily fit within the scope of “pollution”, as it is at least perhaps generally perceived in jurisprudence and case law in Finland.23 Although important from a perspective of principle, the qualification of the effects of climate change as pollution or not is, however, in the end perhaps not essential for assessing whether the Finnish Act on Compensation for Environmental Damage could be a practical tool for a plaintiff claiming damages. Even if greenhouse gas emissions would be found to constitute pollution or other similar nuisance under the Act on Compensation for Environmental Damage, it is fairly easy to envisage that any claim for damages still has a whole range of hurdles in front of it before it would succeed in the Finnish courts.

3.3 The challenge of proving causality

Intuitively it would seem that a plaintiff’s biggest test if he or she were to carry his or her case to a successful conclusion would be meeting the burden of proof.24 This applies to injunctions as well as tort law cases. While the evidence of anthropogenic, i.e. human induced, climate change is mounting and opinions to the contrary have found themselves in a clear minority,25 this only concerns the fact that on the general level there is causality between human actions (or inactions) and the general phenomena of climate change. In a tort law case as well as an injunction case, a plaintiff would need to show that it has suffered loss or damage due to an event that was caused by climate change that in turn was caused by anthropogenic emissions of greenhouse gases.

Thus even though one part of the causal chain, i.e. the general causality between climate change and human activities, is proven, a plaintiff might face considerable hurdles in showing individual causality, i.e. that the damage sustained, e.g. due to extreme weather conditions or flooding, was caused by climate change specifically attributable to greenhouse gases and not, for example, by natural variations in the climate or weather patterns. Moreover, if the plaintiff needs to show that particular emissions of greenhouse gases have caused the particular climate change impact, the plaintiff would start to be as close to an insurmountable brick wall as it is possible to get. It has been noted that current climate science may provide rather limited evidence regarding local climate change impacts as the focus of climate science has, at least so far, mainly been on proving that global or regional climate change is taking place and that human induced activities play a role in it.26

This being said, it can be pointed out that the wider one’s perspective regarding the assessment of damage is, e.g. from an individual real estate plot, to a local community or city, or to an entire geographical region, the closer one seems to move towards a form of merger of general and

22 I.e. i) pollution of the water, air or soil; ii) noise, vibration, radiation, light, heat or smell; or iii) other similar nuisance.
23 See the discussion of above in section 2.1 regarding whether greenhouse gas emissions and climate change are “pollution” as defined under the Finnish Environmental Protection Act.
24 Regarding proof of causation in a legal context, see e.g. Preston, Brian J.: Climate Change Litigation (Part I), 1/2011 CCLR, p. 6–9.
individual causality. It is certainly easier to show a clearer pattern of events following from climate change, for example, as for an entire region than it is for a single piece of real estate.

According to the Finnish Act on Compensation for Environmental Damage, compensation shall be paid if it is shown that there is a probable causal link between the activities and the loss or damage. In assessing the probability of causality, consideration is given, among other things, to the other possible causes of the loss or damage. This lowers the burden of proof for the plaintiff even though it does not reverse the burden of proof. The question that remains is to what level the burden of proof is in practice lowered. During the preparation of the Act the issue was debated, but it seems that lawmakers simply could not come to unequivocal conclusions. Words are open to interpretation and basically everybody may have his or her own perception of what “probable” actually means.27 Thus there is rather little tangible help available in the preparatory works of the Act, except for a statement in the Government Bill noting that a plaintiff would still have to show a probability that is clearly above 50 per cent.28 However, such percentages should be taken with a grain of salt. First of all because of the obvious difficulty in assessing and verifying probabilities in mathematical terms when it comes to a concrete case involving complex issues such as who or what has caused damage or loss due to climate change, and, second, since Finnish courts would probably not find themselves too bound by such statements in the Government Bill anyway.

With respect to the issue of whether greenhouse gases would constitute air pollution or a disturbance in the environment it is important to note that the lowered burden of proof also applies to proving that the defendant has caused the environmental damage.29 A full burden of proof as for the occurrence of the damage or loss itself is still required for a successful case.30 Therefore a defendant must be able to show that he or she has indeed suffered some form of tangible loss or damage.

However, the issue of causality can also be seen from a broader perspective. Since a direct emission of greenhouse gases is a relatively straightforward event in most cases this part of the causal chain of events can be shown quite easily. Furthermore, as greenhouse gas emissions contribute to climate change it is also relatively safe to argue that at least more general impacts of climate change, such as, e.g. sea level rise or melting of permafrost, are within the boundaries of causality. Taking the causality argument one step further, however, would seem to put the general boundaries to a further stress test. This would be the case if a plaintiff sued a defendant for indirect or downstream emissions caused by for example the defendants products but not through the direct activities of the defendant (e.g. car manufacturers, fossil fuel producers or extractors of fossil fuels). From a Finnish law context it would be hard to argue that the Finnish Act on Compensation for Environmental Damage would be applicable since the defendant in such a case would not be causing the alleged damage by an activity a carried out in a certain area, which is a requirement for the Act to be applicable. Thus a plaintiff would very likely need to establish liability under general tort law or another statute, which would on the face of it seem like a challenge.

27 Erkki J. Hollo – Pekka Vihervuori: Ympäristövahinkolaki, Helsinki 1995, p. 120–121.
3.4 Getting around the fact of multiple alleged culprits

On a global scale the anthropogenic greenhouse gas emissions of one point source are arguably relatively minor. Thus, it is not surprising that such an argument would probably constitute the first line of defense in climate change liability litigation. However, as has been pointed out, the impacts of climate change may also be regional or local affecting certain communities to a greater extent than others. Furthermore, the issue is closely linked to how tort law liability in any given jurisdiction deals with cumulative impacts occurring over time and space.31

It can be noted that according to the plaintiffs of the case eventually leading to AEP v. Connecticut (in the Supreme Court proceedings the original plaintiffs were the defendants) the five emitters of greenhouse gases that had originally been sued by the plaintiffs emitted 650 million tons CO₂ annually, which constitutes about 10 percent of emissions from all anthropogenic activities in the U.S. and about 2.5 percent of all anthropogenic global emissions.32 Thus, although not forming a majority share of domestic let alone global emission, one could hardly say that the aggregate amount of emissions would have been insignificant. Especially bearing in mind the myriad of sources of CO₂ emissions worldwide.

As mentioned above in AEP v. Connecticut the Supreme Court did not grant an injunction since federal nuisance law had been effectively displaced as a result of Massachusetts v. EPA.

In this context it is worthwhile to mention one particular court case out of many even though it has not been tried by the U.S. Supreme Court. In Kivalina v. ExxonMobil33 the Native Village of Kivalina and City of Kivalina have sued twenty-four oil companies, energy companies and utilities for damages allegedly caused by the defendants. According to the plaintiffs, global warming, caused by the greenhouse gas emissions of the defendants, has resulted in a diminishing of the Arctic sea ice that protects the Kivalina coast from winter storms. The ensuing erosion and destruction will require the relocation of Kivalina’s residents. The district court dismissed the suit, but the case is currently pending on appeal in the Ninth Circuit Court of Appeals.

One argument for dismissal of the suit in Kivalina v. ExxonMobil was the fact that although the defendants had undoubtedly contributed to climate change, the damages caused to the plaintiffs would still be partial. The district court found it rather a matter of policy than law to decide on the allocation of fault, even if it were true that the defendants had contributed more to the harms caused to the plaintiffs than other parties. This would seem to be a popular and rather persuasive defense, i.e. to argue that greenhouse gas emissions are caused in all human activities around the globe, and as such it is more of a political question to determine which particular sources of emissions should bear the brunt of, e.g., paying for damages caused.

Under Finnish law the Act on Compensation for Environmental Damage provides for joint and several liability for environmental damage. This means that, even if a defendant is found to have only caused part of the environmental damage, the defendant would as a rule be jointly and severally liable for the entire damage or loss. A jointly and severally liable defendant may in turn

33 Native Village of Kivalina et al v. Exxonmobil Corporation et al, U.S. district court for the northern district of California, Case No: C:08-1138 SBA, Docket 171, 172, 175, 176, 177, order granting defendants’ motions to dismiss, September 30 2009.
either sue (implead) co-liable third parties making such third parties defendants in the same lawsuit or alternatively choose to sue co-liable third parties in a separate court process.

Even though joint and several liability provide a powerful weapon in the arsenal of a plaintiff seeking damages under Finnish law, it must be emphasized that due to the nature of climate change as a global problem a plaintiff may still stumble in its attempt to win a case before the Finnish courts. This is due to the fact that under the Act on Compensation for Environmental Damage the defendant is not jointly and severally liable for the entire damage or loss if the defendant’s share in inflicting the damage or loss is manifestly minor.

As with many wordings in legal acts there is no clear-cut way of interpreting when a share is more than manifestly minor. However, the reasons for including the exception in the Act are interesting and could give clues to the interpretation. In the original Government Bill the exception was lacking. It was only added in the committee deliberations in the Finnish Parliament since the original proposal was considered to be unfair. According to the original proposal even if a defendant were responsible for only a minimal amount of the caused damage, such a defendant would still have been jointly and severally liable for the whole damage. Thus it can be argued that the objective of the exception is more or less to enable the courts to use a test of reasonableness and fairness when they apply joint and several liability in a particular case.

As each contributor to climate change would under Finnish law be considered as one defendant it is almost certain that any defendant that falls under the jurisdiction of Finnish courts would only have a manifestly minor input as for global greenhouse gas emissions and as a consequence a manifestly minor effect on global climate change. Therefore a defendant would not be jointly and severally liable under Finnish law. If a plaintiff could somehow show that particular greenhouse gas emissions are responsible for a particular or local climate change event, the conclusion could be another one.

It is also worth mentioning that the directive on environmental liability with regard to the prevention and remedying of environmental damage (2004/35/EC) (“Environmental Liability Directive”) was, as for its procedural parts, implemented through the Finnish Act on the Remediation of Certain Environmental Damages. The Directive and the Act do not directly cover tort law liability, but rather deal with the issue of prevention and remediation of environmental damage. Nevertheless, under the Directive and the Act the operator shall bear the costs for the preventive and remedial actions taken pursuant to the Directive and the Act. Thus the Act may very well be of relevance also in a climate change liability case where a plaintiff uses its right under Finnish law to petition the authorities to take action against a defendant in case of alleged damages. The Act is, for example, applicable to damage to protected species and natural habitats.

However, more importantly for the issue at hand, the Environmental Liability Directive applies to damage caused by pollution of a diffuse character, only if it is possible to establish a causal link between the damage and the activities of an individual operator. Emissions causing global climate change would probably fall under what is understood as being of a diffuse character. Under section 10 of the Finnish Act on the Remediation of Certain Environmental Dam-

36 Act 29.5.2009/383.
ages, if the damage was caused by more than one activity, the responsibility for the costs are to be allocated among the operators according to their share of the total damage. And furthermore, if such share cannot be assessed, the responsibility must be divided per capita. This gives any defendant in a climate change liability case a powerful defense since, unless there is evidence of individual causation of a particular, local or regional, climate change event, the per capita argument can be taken to global levels, i.e. the defendants share of global emission, which in practice would mean that any covering of costs would be minimal. Naturally, in case, the total sum of the remediation costs is considerable, even a small share could amount to a significant burden for a particular defendant.

4 Final remarks
Generally speaking and setting aside questions relating to the definition of “pollution”, the particularly difficult issue that a successful nuisance or tort law climate change lawsuit would need to overcome is to demonstrate causality between a particular action or operation and climate change related impacts. It would seem safe to say that damage or loss caused by anthropogenic climate change is the cause of an unusually complex chain of events. It may even not be correct to speak of a “chain” of events since multiple different effects would seem to be at work.

Furthermore, the issue of accountability of a plaintiff or a set of plaintiffs for a climate change event that most likely is not solely caused by the plaintiff(s) will require a court to weigh and balance the issue of liability. Naturally individual jurisdictions may have different variations on these questions as well as further domestic peculiarities related to, for example, standing or justiciability, not common with other jurisdictions.

Further practical issues include that not only would there be many potential defendants, i.e. a lot of “responsible” parties, but also several potential plaintiffs, i.e. “everybody” may “suffer”. In this regard an action against municipalities or public authorities on the grounds that development approval or planning and zoning has been poorly conducted, e.g. due to risks relating to e.g. flood prone areas, erosion or landslides could perhaps have a better chance of success from this narrow perspective. At least in the latter cases the plaintiff versus defendant constellation would seem to be more straightforward as the number of defendants would probably be more limited.

But what is perhaps most important to realize is that environmental pollution related problems have long since stepped out of a clearly and easily defined two-party relationship, i.e. a classic nuisance case, where neighbors of two adjacent properties have a dispute regarding the use of one’s property and the negative impacts of such use on the other’s property. Issues are of a completely different magnitude as can, for example, be witnessed in the development of environmental law in the past decades in the fields of transboundary air pollution, ozone depletion, and lately regarding climate change mitigation and adaptation. Climate change induced nuisance, damage or loss is particularly problematic in this sense since it seems to force standard nuisance law and tort law into a whole new dimension in this respect. It is possible to take the discussion of who is a plaintiff and who is a defendant into ab-

surdity, since practically every human being on Earth contributes to greenhouse gas emissions, and everybody, corporations included, could probably to some extent claim to have suffered some damage or loss due to climate change. Even though environmental law as a field of law has been evolving, it is a different issue whether tort and nuisance law have kept up or even could or should keep up with the increasing globalization of environmental problems such as climate change. Tackling these kinds of problems would be more suitable with other instruments. But this is of course easier said than done.