

Vanesa Vujanić: Climate Change Litigation and EU Environmental Liability Directive Zbornik radova Pravnog fakulteta u Splitu, god. 48, 1/2011., str. 135.-164.

Vanesa Vujanić Centre for Energy, Petroleum and Mineral Law and Policy, University of Dundee, LLM Candidate

CLIMATE CHANGE LITIGATION AND EU ENVIRONMENTAL LIABILITY DIRECTIVE

UDK: 349.6 (4) Pregledni znanstveni rad Primljeno: Studeni, 2010.

In 2001, the administration of the U.S. president George W. Bush completely pulled out from the possibility to adopt the Kyoto Protocol. This, as well as the lack of the adequate policy and legislation necessary to tackle the issue of global warming and impacts of climate change caused the shift of creating the appropriate legislative regime from the regulatory and executive levels of political power to the courts, hence causing important development of the climate change litigation. Subject litigation is not only the U.S. but also a global phenomenon. It can be encountered in Europe in spite of its very advanced environmental and climate change legal regimes. The validity of this statement is however questionable, particularly with respect to the level of effectiveness and applicability of the EU Environmental Liability Directive (the "ELD") in the climate change litigation. Unfortunately, ELD does not provide for the complete and comprehensive liability regime that would ensure proper liability regulation related to the environmental issues. In fact, some say that its name should be Environmental Responsibility Directive. The aim of this paper is to determine the level of the applicability of the ELD in the climate change litigation, its limits and potential problems. For that purpose, the author examines the existing legislative regimes and climate change litigation cases in the U.S. and at the EU level. The paper will end with a short study on the status of the climate change litigation and potentially applicable regime in Croatia (including the ELD). Overall conclusion is that the applicability of the ELD in the climate change litigation is very limited.

Ključne riječi: Climate change, litigation, EU directive

1. INTRODUCTION

There are various ways in which an issue of climate change has been dealt with until now and will be dealt in the future. European Union has demonstrated leadership position in tackling impacts of climate change, mostly by adaptation of numerous environmentally and energy related soft and binding legislation. However, adopting respective European legislation is only one fragment of the "long battle" still lying ahead. In order to adequately address the problem of global warming, activities can not be geographically or substantially limited. This

particularly refers to the necessity of other countries, particularly those financially powerful and those gravely contributing to the global warming, to follow the European path in development of legislative and regulatory environmental and energy regime. In addition, it implies necessity for a proper implementation of the legislation and its effective enforcement. Wherever and whenever this is lacking, for whatever reasons, alternative options and/or corrective measures can not be avoided. These alternative and corrective tools are mostly used by those who are not in charge of the above mentioned legislative procedures (i.e. policy makers and legislative bodies of a particular country) but rather by those standing on the other, corrective side including, without limitation to, the affected or environmentally conscious individuals, human rights groups, environmental and other non governmental organizations, international organizations and science groups such as Intergovernmental Panel on Climate Change, etc.)¹

There are several ways in which these alternative and corrective measures could be executed. One way is through lobbying and media pressure purpose of which is to (i) introduce to the competent authorities "on the ground issues" and consequently to (ii) provoke and motivate in order to trigger their reaction and ensure appropriate development or reform of climate change policy and legislation. Another way is through climate change litigation which has been continuously used in the last decade² and continues to grow. The imperative of the climate change litigation is not necessarily to make courts overtaking the role of the climate change policy creators from the legislative institutions, but to impose further pressure on the competent authorities to properly address climate change problem.³

Development of climate change litigation mostly refers to the US due to its government's position not to adopt the Protocol to the United Nations Framework Convention on Climate Change⁴ and non readiness of the US legislative bodies to adopt adequate climate change legislation.⁵ In 2001, the administration of the president George W. Bush completely pulled out from the possibility to adopt the Kyoto Protocol. All that caused a shift in creating proper global warming policies from the legislative, regulatory and executive levels of political power to the

¹ Gupta, J., Legal Steps Outside the Climate Convention: Litigation as a Tool to Address Climate Change, RECIEL Volume 16, Issue 1, 2007, p.p.76

² The first petition within the climate change litigation, International Centre for Technology Assessment (the "ICTA") et al. vs. Environmental Protection Agency regarding regulation of greenhouse gasses from new motor vehicles, has been filed in 1999. See Heinzerling, L., Climate Change in the Supreme Court, Georgetown University Law Center, Environmental Law, Volume 38, 2008, p.p.3, (an edited version of the 20th Annual Natural Resources Law Institute Distinguished Lecture, delivered on 03 October 2007 at Lewis and Clarke Law School), available at http://ssrn.com/abstract=1087385, last visited 17 March 2010

³ Cofre, A., J., Rock, N. And Watchman, Q.P., *Climate Change Litigation*, in A Guide to Carbon Law and Practice, consulting editor Paul Q. Watchman, Globe Law and Business London, 2008 p.p.229

⁴ Protocol to the Framework Convention on Climate Change (Kyoto), 37 ILM (1998J) 22, entered into force 16 February 2005

⁵ See Cofre et al., supra, note 3, p.p.229

courts and climate change litigation.⁶ Climate change litigation emerged from the circumstances existing in the US. Nevertheless, it is a global phenomenon and it has slowly but safely being dispersing to Europe as well as to other jurisdictions,⁷ both those of the developed as well as of the developing world.⁸

This paper shall examine existing climate change litigation and discuss legal grounds and frameworks applied in the subject procedures. Overview of the US practice, being the most developed one, shall be laid down and described both in terms of cases and in terms of applicable legislation. The goal is to determine its prosperity for reaching court decisions in favour of stakeholders acting against global warming and climate change. The author shall further examine respective European Union legal framework and existing climate change litigation concentrating primarily on the study of the EU Environmental Liability Directive.⁹ By demonstrating discrepancies between the particularities of the climate change proceedings (such as remedies or proving of causation link) and the particularities and limits of the ELD, the author will be able to conclude on the level of the applicability and suitability of the ELD to be used as legal basis in the existing climate change litigation. The final analysis shall refer to the presentation of the Croatia's legal framework and legal basis potentially usable in the climate change litigation, in particular the ELD. For that purpose, the form and content in which the ELD has been implemented in the Croatian laws shall also be inspected.

2. LEGAL FRAMEWORK AND CLIMATE CHANGE LITIGATION PRACTICE

Determination of the respective legal basis and legislative frameworks' availability is extremely important for lawyers involved in the climate change litigation. ¹⁰ It is a condition sine qua non. Non existence of the comprehensive environmental liability legislation in the countries potentially affected by climate change makes the usage of subject litigation tool even more difficult. "Bits and

⁶ Heinzerling, L., Climate Change, Human Health, and the Post-Cautionary Principle, The Georgetown Law Journal, Volume 96, 2007-2008, p.p.457

⁷ Munich RE, Liability for Climate Change, Experts' views on a potential emerging risk, *Climate-Change litigation: American Phenomenon or Global trend?*, Interview with Paulino Fajardo at Davies Arnold Cooper, March 2010, p.p.19, available at http://www.munichre.com/en/profile/focus/climate_change/default.aspx, last visited 17 July 2010

⁸ In 2005, an Australian society for wildlife preservation initiated proceedings against Australian Government for failing to consider impact of global warming on a very sensitive ecosystems e.g. Great Barrier Reef. In the same year, communities from Niger River Delta petitioned for termination of gas flaring causing emitting of enormous amount of CO2 in the atmosphere against oil companies present in the area. *See* Gupta, supra, note 1, p.p.81-83

 $^{^9}$ Directive 2004/35/CE of the European Parliament and of Council on environmental liability with regard to the prevention and remedying of environmental damage, L 143/56, adopted on 21 April 2004, entered into force on 30 April 2004, amended by Directive 2006/21/EC, OJ L 102, adopted on 11 April 2006, entered into force 01 May 2006

¹⁰ See Cofre at el., supra, note 3, p.p.229

pieces" of the potentially applicable environmental liability provisions exist at the national and international level, in soft and binding documents. They are however spread over various sectors which are or could be influenced by climate change. In addition, applicable provisions can also be found within the acts of general nature such as civil, criminal and administrative, substantive or procedural acts, etc. It is therefore necessary to create climate change related liability and damage regime per se, primarily based on the principles discussed below. 12

2.1. LEGAL PRINCIPLES

Several principles appearing within international, supranational and national legislation refer to the climate change issues and are considered as the highest standards used for determination of climate change liability. These principles are driven from the general environmental law. The two most important ones are precautionary principle and polluters-pay-principle.¹³

The precautionary principle is recognized in the Article 3.3 of the United Nations Framework Convention for Climate Change. 14 Recognition and application of the concept of climate change liability is partially possible due to the application of the precautionary principle, main reasons being the existence of the (i) obligation for undertaking preventive measures even in cases when an environmental damage is not established and (ii) the shifting of the burden of proof from the ones opposing the measures to those wishing to undertake the measures that could cause negative effects towards the environment. Only after they prove the non existence of such effects shall they be authorized to undertake these activities. Without such shifting of the burden of proof many economic actors, including states, would be able to defend themselves from climate change liability by arguing impossibility of the other side (i) to prove that particular climate change impact was not caused by emissions existing before 1990 (baseline set up in the UNFCCC) and/or (ii) to prove a distinction between climate change impacts caused by anthropogenic emissions from those caused by non anthropogenic emissions. Precautionary principle disqualifies such defensive arguments and creates opportunity for a much wider application of the climate change liability.¹⁵

The precautionary principle implies the application of other principles such as the principle of sustainable development, no-significant-harm principle and cost-effective principle. These are closely connected and interdependent among themselves. The application of the precautionary principle implies application of

¹¹ Cullet, P., Liability and Redress for Human-Induced Global Warming: Towards an International Regime, Stanford Environmental Law Journal, Volume 26, 2007, p.p.114

¹² See Cullet, ibid, note 11, p.p.114

¹³ Polluter-pays principle will be discussed within the chapter on the ELD.

¹⁴ United Nations Framework Convention on Climate Change, 31 ILM (1992) 851, entered into force 21 March 1994. According to Article 3 of the UNFCCC, certain measure to prevent, anticipate or minimize the causes, and mitigate the negative impacts of climate change are to be undertaken.

¹⁵ See Cullet, supra, note 11, p.p.105-106

cost-effectiveness in terms of requirements for climate change policy and measures to be cost-effective i.e. quality environmental protection for minimum costs. No-significant-harm principle further strengthens liability for climate change trying to affix the liability on anyone causing the harm which is - historically looking - the developed world. ¹⁶

Some say that the precautionary principle is no longer applicable to the climate change liability issues due to the comprehensive consensus (in the scientific circles particularly) on the doubtless existence of the causes and consequences of climate change - which is documented in various reports such as the IPCC Third Assessment Report.¹⁷ Instead, current era could be characterized as a post-cautionary period with evidences of climate change being very strong, causing the urging need for an uncompromised, fast and assertive reaction.¹⁸ Recognition of the post-cautionary period is one of the reasons to further encourage developments of climate change litigation.

2.2. LEGAL CAUSES FOR CLIMATE CHANGE LITIGATION

Before exploring the cases and legal framework applicable particularly to the United States, the author shall define and explain legal causes for climate change litigation. These can be divided into three main groups – (civil) liability litigation, administrative laws litigation and consequential litigation.¹⁹

2.2.1. (Civil) Liability Litigation

Under (civil) liability litigation the liability arises from the wrong i.e. *tort* in the common law systems or *delict* in the civil law system. It is the latter system which refers to the civil liability litigation that has been used for handling a complex system of the environmental and climate change liability issues. Over time, not only the damage to the persons and the property but also the damage to the environment has been encompassed by the civil liability system imposing possibility to set forth the obligations to compensate loss of income, environmental clean up costs and preventive measures costs.²⁰ The latter two are the types of costs relevant to the compensation of damage occurring as consequence of the climate change. They are especially relevant to the application of the ELD as one of the possible legal grounds for determination of the climate change liability. Deciding on the climate change liability within the civil liability regime can cause various problems. This mainly due to the differences in the approaches regarding

¹⁶ See Gupta, supra, note 1, p.p.75-77

¹⁷ Grossman, A. D., *Warming up to a Not-so-Radical Idea: Tort-based Climate Change litigation*, Columbia Journal of Environmental Law, Volume 28, Issue 1, 2003, p.p.9-17

¹⁸ See Heinzerling, supra, note 6, p.p.2, 21-25

¹⁹ Consequential litigation shall not be discussed in this paper. However, it indirectly relates to the climate change issues and refers to the claims against corporations who fail to undertake preventive measures or falsely advertise projects as being "green", etc. *See* Cofre at el., supra, note 3, p.p.246

²⁰ See Cullet, supra, note 11, p.p.109-110

the types of liabilities and remedies set forth for the environmental damage, and liabilities and remedies set forth for the personal injuries and property damages (i.e. "traditional damage").²¹ Both the environmental and the "traditional damage" can appear as a climate change consequence.

There are various types of civil wrongs. Private and public nuisance, negligence and product liability are the most relevant and the most used ones in the climate change litigation.

Private nuisance

Private nuisance is an unreasonable interference with the use and enjoyment of another person's property. Difficulty with private nuisance cases encountered in the climate change litigation refers to the plaintiff's obligation to prove that the (unreasonable) interference with the use and enjoyment of someone's property (e.g. erosion of the coast or flooding) was caused by the climate change induced by an action or actions of the owner of the neighbouring land. As global warming is a global issue this is very difficult to prove. Once the emissions leave the source it is almost impossible to track them back to their original source. Nuisance liability requires such determination and proof²³ and is therefore less used in the climate change cases. Description of the coast of the plainties of the

Public nuisance

Public nuisance is an unreasonable interference with a common right that belongs to the public.²⁵ It is much more used in the climate change litigation²⁶ than the private nuisance as it does not require the same proof - mostly because climate change causes have less to do with the enjoyment of someone's particular property. However, plaintiff is obliged to prove that the interference is unreasonable²⁷ i.e. that it (i) has caused a significant harm, (ii) was continuous and (iii) unlawful, or if not unlawful, at least such as that the defendant failed to undertake actions to mitigate the consequences.²⁸ Unlawfulness within the climate change litigation might be rare as global warming very often arises from the lawful actions. In fact, it arises from the actions which are very often in line with the respective

²¹ See Cullet, supra, note 11, p.p.111

²² Duke Law School (Official site), Salzman, J. and Hunter, D., *Negligence in the Air: The Duty of Care in Climate Change Litigation*, Research Paper Series, Research Paper no. 160, 2007, p.p.109, available at http://ssrn.com/abstract=991669, last visited 17 July 2010.

²³ See Cofre et al., supra, note 3, p.p.232

²⁴ See Grossman, supra, note 17, p.p.52

²⁵ See Grossman, ibid, p.p.53

²⁶ One of the most famous and the most important climate change cases is based on the legal cause of the public nuisance - the Kivalina et el. vs. ExxonMobil Corp. et el. case that will be discussed later in the paper.

²⁷ According to the IPCC report, climate change represents unreasonable interefrence. *See* Maag, B., K., *Climate Change Litigation: Drawing Lines To Avoid Strict, Joint and Several Liability*, Georgetown Law Journal Volume 98, Issue 1, , November 2009, p.p.187

²⁸ See Grossman, supra, note 17, p.p.53-55

authorizations, permits, etc. 29

Negligence

Negligence exists when the defendant's duty of care towards plaintiff has been breached with unreasonable actions causing foreseeable damage. The burden of using negligence as legal basis for the climate change litigation refers to the difficulty of proving the "unreasonableness" of actions as these (i.e. emissions) are often lawful i.e. in line with the authorizations or permits.³⁰

2.2.2. Administrative Liability Litigation

Administrative liability litigation in terms of climate change refers to the claims against public institutions when they commit a breach of a certain obligation or they fail to act or regulate certain actions, primarily those relating to the limitation of the greenhouse gases emissions.³¹ This type of liability litigation can be divided into three main groups briefly described below. In addition to these three, an appeal against the government's decision related to the emission trading schemes (the "ETS") are also considered as part of climate change litigation mainly due to the fact that the ETS schemes are used as tools for tackling the impacts of climate change.³²

Claims related to the planning and permitting system

Subject claims appear in the situations where a competent state body omits to properly inspect impacts of certain activities or projects when issuing planning or other types of permits, e.g. failure (i) to execute an environmental impact assessment (the "EIA"), (ii) to properly inspect an EIA study or even (iii) to consider an EIA study when issuing a permit. Plaintiffs appeal to or challenge the planning or other relevant permit.³³

Claims related to the failure to regulate

These claims are filed when the competent authority fails to further regulate GHG emissions even though such obligations exist within the applicable legislation. The most famous example of such administrative claim is the case Massachusetts vs. Environmental Protection Agency (the "EPA") which will be

²⁹ Whether a compliance with the emission standards from the permit or authorization is defined as exculpatory reason from the liability or not shall depend on the regulation of each particular country. According to Belgium law, compliance does not provide the exculpation as the issuing authority is unable to anticipate any or every harm an emission may cause to the third parties. The compliance is a minimum requirement for non liability. Liability shall still exist even in case of compliance. The same applies to Dutch law safe for when a particular damage and a particular victim have been anticipated in the permit. See Faure, G. M., & Nolkaemper, A., International Liability as an Instrument to prevent and compensate for Climate Change, Stanford Environmental Law Journal, Volume 26, 2007, p.p. 151-155

³⁰ See Cofre et al., supra, note 3, p.p. 233

³¹ See Cofre et al., supra, note 3, p.p.230

³² See Cofre et al., supra, note 3, p.p.245

³³ See Cofre et al., supra, note 3, p.p.239-241

discussed in Chapter 2.3.34

Claims against export agencies

These claims refer to the cases³⁵ when a government funds the projects that are likely to contribute to the global warming and fails to properly evaluate such impact.³⁶

2.3. LEGAL FRAMEWORK AND CLIMATE CHANGE LITIGATION – U.S. EXPERIENCE

2.3.1. Legal Framework

United States as any other country in the world is lacking a comprehensive legal regime that would regulate liability for adversarial climate change impacts. Nevertheless, climate change litigation continues to rise.³⁷ Rules constituting U.S. legal framework for climate change can be divided in three major groups depending on the type of claims filed to determine liability arising from global warming. These are (i) statutory claims, (ii) common law claims and (iii) public international law claims.³⁸

Statutory claims form two groups. The first one relates to the claims whose aim is to compel U.S. government to undertake certain measures or actions. Such claims are filed based on the Clean Air Act (the "CAA")³⁹ being the most debated and the most significant one when it comes to the climate change litigation. Apart from the CAA, other statues are often used including without limitation to the Clean Water Act, Global Change Research Act, Marine Mammal Protection Act, Endangered Species Act, Alternative Motor Fuels Act, Energy Policy Act and Freedom of Information Act. The second group relates to the claims used to preclude the U.S. government from undertaking certain actions which e.g. could be based on the National Environmental Policy Act (the "NEPA").⁴⁰

Common law claims also form two groups. The first group relates to the claims in which the plaintiffs seek injunctive relief and the second one in which

³⁴ See Henizerling, supra, note 2, p.p.3

³⁵ An example of the subject administrative liability litigation is the case Friends of the Earth, Greenpeace, Inc. and City of Boulder Colorado vs. Overseas Private Investment Corporation, Export-Import Bank of the United States filed due to government's failure to properly assess possible negative impacts to the environment by the activities that have financially been supported by the U.S. export agency. *See* Gupta, supra, note 1, p.p.80-81

³⁶ See Cofre et al., supra, note 3, p.p.243-244

³⁷ University of Denver, Sturm College of Law (Official site), U.S. Climate Change Litigation Chart: Excellent Resource for Following "Progress" in U.S.-based Lawsuits, April 20, 2010, available at http://enrlgp.blogspot.com/2010/04/us-climate-change-litigation-chart.html, last visited 25 July 2010

³⁸ Columbia Law School (Official Site), U.S. Climate Change Litigation Chart, 2010, available at http://climatecasechart.com, last visited 25 July 2010

³⁹ Clean Air Act, 42 U.S.C., § 7401

⁴⁰ See U.S. Climate Change Litigation Chart, supra, note 37, at Statutory claims

the plaintiffs seek monetary compensation. ⁴¹ Injunctive relief is petitioned for in situations where the actions of the defendants are unreasonable so that they have to be stopped regardless whether the damage or harm has already occurred or not. On the other hand, monetary compensation is claimed in cases when the plaintiffs suffered significant harm by themselves or harm to their property. ⁴² This type of monetary compensation shall never be claimed under the ELD as it does not recognize monetary compensation for the damage incurred to the persons or the property. ⁴³

Public International Law Claims are the claims (with respect to the U.S.) filed against U.S. based on the rules of international nature. These claims are dealt with before a competent international body if such exists and are very often connected with the issues of human rights, rights to a healthy environment, etc. An example of the public international law claims is the case where the Inuit people endangered by global warming (partially caused by U.S. decision not to participate in the Kyoto Protocol) petition for the protection of their human rights. Another example is the case related to the proclamation of the specific areas, species or monuments as world heritage sights. Both cases are based on the fact that the climate change impacts human rights or survival and preservation of natural habitats and species. The latter case is of a particular significance for the application of the ELD as it, within its scope, covers the liability for damages caused to the natural habitats and species. ELD as such, might be used as a legal tool in the climate change litigation.

2.3.2. Climate Change Litigation Cases

As already explained above, the causes for climate change cases are diverse. The most often ones are those referring to the public nuisance and claims filed due to the competent authority's failure to fulfil its obligation to regulate important issues such as limitations of the GHG emissions. This section deals with some of the most famous and noteworthy examples of U.S. climate change litigation.

State of Connecticut et al. vs. American Electric Power Company Inc. (the "AEP") et al. 46

The action was filed by the City of New York and eight federal states against five large U.S. power companies responsible for emitting app. 10% of all anthropogenic

⁴¹ See U.S. Climate Change Litigation Chart, Ibid, at Common Law Claims

⁴² See Grossman, supra, note 17, p.p.58

⁴³ See ELD, supra, note 9, Article 3.3

⁴⁴ The claim was filed at the Inuit Circumpolar Conference before the Inter-American court of Human Rights. Legal document on which the claim was based was the American Declaration of the Rigts and Duties of Man. *See* Gupta, supra, note 1, p.p.82-83

⁴⁵ See Gupta, ibid, p.p.82-83

⁴⁶ State of Connecticut, et al. vs American Electric Power Company Inc., et al., 406 F. Supp 2d 265 (vacated and remanded by Connectucut vs. American Electric Power Co. Inc., 582 F.3d 309

carbon dioxide emissions in the United States.⁴⁷ It was filed under the federal common law or state law regulating public nuisance.⁴⁸ The aim of the claim was to protect the natural resources from such unreasonable interference⁴⁹ for which purpose the request for injunction relief to limit carbon dioxide emissions and to order regular reductions per annum was submitted.⁵⁰ The lawsuit was dismissed by the U.S. District Court stating that the subject matter represented non-justiciable political question which should be resolved at the legislative or executive levels.⁵¹ Political question doctrine basically means that an issue of a political nature has to be discussed in the political arena and not before the courts.⁵² In September 2009, the Second Circuit Court vacated the dismissal and remanded the case stating among other things that the subject claim was not a political question, and ordered further proceedings.⁵³

Ned Comer et al. vs. Murphy Oil U.S.A. Inc. et al.54

This was a class action (headed by Ned and Brenda Comer) filed against oil, coal and chemical companies for the reasons of their contribution to the increase of GHG emissions, which further on laid to the global warming, climate change and eventually to the hurricane Katrina, causing injuries, damages to the property and the environment, endangering public health, etc.⁵⁵ Legal causes for the lawsuit were diverse: private and public nuisance, negligence, civil conspiracy, trespass, etc. The plaintiffs petitioned for the money compensation.⁵⁶ The district court dismissed the claim applying the non-justiciable political question doctrine and lack of standing.⁵⁷ Nevertheless, the appellate court reversed the decision and ordered further proceedings. It determined that the political doctrine issue was not applicable to this particular case and that the plaintiffs had a standing⁵⁸ as they

⁴⁷ See Salzman et al., supra, note 22, p.p.112

 $^{^{48}}$ In public nuisance cases the plaintiffs have to prove that the interference with the public right is unreasonable. See Grossman, supra, note 17, p.p.54

⁴⁹ See Salzman et al., supra, note 22, p.p.113

⁵⁰ See U.S. Climate Change Litigation Chart, supra, note 37, at Common Law Claims, State of Connecticut et al. Vs. American Electric Power Company Inc. et al., p.p.1

⁵¹ Bloomberg Law Reports (Official Site), Carroll, C., M., et al., Climate Change, Climate Change Liability and Defence, Comer and Insurance: Who Will End Up Paying?, 28 May 2010, p.p. 2, available at http://www.mckennalong.com/media/site_files/1268_Carroll-Evans%20-%20BLR-Climate.pdf, last visited 25 July 2010.

⁵² See Gupta, supra, note 1, p.p.80

⁵³ See Bloomberg Law Reports, supra, note 51, p.p.2

⁵⁴ Ned Comer, et al. vs. Murphy Oil U.S.A. Inc., et al., 585 F.3d 855 (5th Cir. 2009)

⁵⁵ See Salzman et al., supra, note 22, p.p.114-115

⁵⁶ See U.S. Climate Change Litigation Chart, supra, note 37, at Common Law Claims, Comer vs. Murphy Oil, p.p.1-2

⁵⁷ Ned Comer et al. vs. Murphy Oil U.S.A. Inc. et al., No. 1:05-CV-00436-LTS-RHW

⁵⁸ Standing is demonstrated if (i) the damaged party suffered a particular damage, if (ii) the damage is fairly traceable to the particular conduct of the defendants and if (iii) the damage is likely to be relieved in case of the favourable decision. *See* Cofre et al., supra, note 3, p.p.250-251

managed to prove that the injuries and damages suffered were "fairly traceable" to the sued companies' actions.⁵⁹

State of Massachusetts et al. vs. Environmental Protection Agency et al.60

This case is an example of the administrative liability litigation case. This is the first case in which the Supreme Court of the United States addressed and decided on the issue of climate change. It has already immensely influenced the development of climate change litigation and state authorities when deciding on regulation and limitation of the allowed amounts of GHG emissions. Some state authorities have already refused to issue permits to coal power plants on the basis of their obligation for the emissions control.⁶¹

The case was initiated by the petition of the ICTA to the EPA to regulate the emissions of the GHG from new motor vehicles, based on the Section 202(a) (1) of the Clean Air Act according to which the EPA is under the obligation to regulate air pollutants from new motor vehicles.⁶² EPA refused to regulate stating that the GHG are not air pollutants and even if it did have the authority for such regulation it would not exercise subject right due to (i) the causal link being weak and (ii) probable U.S. president's intention to leave the issue to be handled through voluntary reductions of GHG within the private industry sectors.⁶³ The State of Massachusetts together with the other plaintiffs filed a claim before the D.C. Court for revocation of EPA's decision. The case was dismissed.⁶⁴ However, the Supreme Court eventually ruled in favour of the plaintiffs stating that (i) the plaintiffs had the standing,⁶⁵ (ii) EPA had the competence to regulate and that (iii) EPA's refusal to do so was "arbitrary".⁶⁶

2.4. LEGAL FRAMEWORK AND CLIMATE CHANGE LITIGATION – EC LAW AND ECJ EXPERIENCE

Climate change litigation in the countries outside of the U.S. is still to arise. There are several reasons for the reluctance towards climate change litigation. The main ones being (i) unlikelihood of contingency fee arrangements with the legal representatives in Europe, (ii) inability or strictly conditioned possibility for filing class actions in European countries and (iii) monetary damage compensation

⁵⁹ See Bloomberg Law Reports, supra, note 51, p.p.2-3

⁶⁰ State of Massachusetts et al. vs. Environmental Protection Agency et al., 127 S. Ct. 1438 (2007)

⁶¹ See Heinzerling, supra, note 2, p.p.5

⁶² See Gupta, supra, note 1, p.p.78-79

 $^{^{63}}$ See U.S. Climate Change Litigation Chart, supra, note 37, at Statutory Claims, Massachusetts vs. EPA, p.p.1

⁶⁴ See Gupta, supra, note 1, p.p.79

⁶⁵ The standing was accepted by the Supreme Court despite the level of the scientific uncertainty and of the causal connection in the case. In fact, the applicable provision of the CAA "not only allows but requires regulation even in case of scientific uncertainty". *See* Henizerling, supra, note 2, p.p.12

⁶⁶ See Henizerling, supra, note 2, p.p.5

awards of significantly lower amounts than in the U.S.⁶⁷ Nevertheless, climate change litigation already exists in Europe and the respective European Community (the "EC") law has been applied accordingly.

2.4.1. Legal Framework

The most important piece of the EC law regulating environmental liability is the ELD. The ELD could also be used to address liabilities arising from climate change. To what extent is the ELD applicable and suitable to address those liabilities will be discussed in depth in the following chapter. Nevertheless, needs to be said that the scope of the climate change liability is broader than the scope covered by the ELD.

Apart from the ELD, the only other document that offers acceptable comprehensive approach for the regulation of the environmental liability is the Council of Europe's Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (the "Lugano Convention").⁶⁸ The Lugano Convention would probably be better suited for the climate change litigation than the ELD as it provides for the much wider scope in terms of types of the damages covered, types of remedies, etc.⁶⁹As the Lugano convention has not been ratified and hence does not apply, the author shall refrain from discussing its particularities.⁷⁰ Nevertheless, needs to be emphasized that while the ELD deals exclusively with the environmental damage, the Lugano convention deals with other types of damages including, without limitation to, the damages to the property and personal injuries which are often types of the damages suffered due to the climate change.⁷¹ Liability for these types of damages would be left undetermined under the application of the ELD.

As the EU places the climate change issues very high on the agenda of the EU⁷² it has adopted a significant amount of the EC legislation that deals directly or indirectly with the climate change issues⁷³ and thus could at the certain degree

⁶⁷ See Cofre et al., supra, note 3, p.p.231-232

 $^{^{68}}$ Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment, 32 I.L.M. 1228, adopted 21 June 1993

⁶⁹ See Cullet, supra, note 11, p.p.114

⁷⁰ Despite its adoption seventeen years ago, only nine states signed the convention. The convention has still not been ratified. See Cambridge University (Official Site), Environmental Liability and Ecological Damage in European Law, Part 1 – Environmental Liability in Europe, Hinteregger, M., ed., Cambridge University Press, p.p.3-4, available at www.cambridge.org, last visited 14 July 2010

⁷¹ Birnie, P., Boyle, A. and Redgwell, C., International Law & the Environment, Third Edition, Oxford University Press Inc., New York, 2009, p.p. 318

⁷² European Union (Official Site), Europa, Summaries of EU Legislation, Tackling Climate Change, 2010, p.p. 1, available at http://europa.eu/legislation_summaries/index_en.htm. last visited 26 July 2010

⁷³ Subject legislation constitutes a part of the EU Climate Change Policy which consists of a variety of directives, strategies, action plans, programmes, schemes, regulations, green papers, white papers, etc. which could at the certain level be used in the climate change litigation cases. *See* Summaries of EU Legislation, *Tackling Climate Change*, ibid, p.p.1-4

be used as the legal basis in the climate change litigation. Some legislation has already been used in the subject litigation. It comprises primarily of the regulations, directives and decisions regulating the ozone layer depletion, quality of the ambient air, GHG emissions allocation, air pollution from various sources and plants, limitation of allowed amounts of anthropogenic substances in the air, consumer information, etc. Other legislation is expected to be used in the future, e.g. the acts regulating energy saving, alternative energy, energy efficiency of buildings, production of electricity from the renewable energy sources, etc.⁷⁴ It is exactly the legislation regulating the above issues that could present the legal basis for the climate change litigation at the EU level.

2.4.2. Climate Change Litigation Cases

The nature of the claims is diverse. The claims and the cases are either directly or indirectly connected to the climate change issues.

United Kingdom of Great Britain and Northern Ireland v. Commission (T-178/05)⁷⁵

The case refers to the UK's claim for the annulment of the EC decision prohibiting the increase of the total amount of the emission allowances. The European Court of Justice (the "ECJ") ruled in favour of the subject increase which is from the environmental protection perspective unpopular decision. However, it is in line with Member States right to adjust the execution of their allocation plans.⁷⁶

Commission v. Council (C-176/03)77

The case is significant for the ECJ jurisprudence as it is the first time that the application of the criminal law and the execution of the respective sanction for the environmental damage has been introduced.⁷⁸

Commission v. Austria (C-320/03)⁷⁹

The case deals with Austria prioritizing protection of the environment over its obligation to secure free movement of goods. Austria prohibited usage of certain types of vehicles in order to reduce the emissions of the GHG and thus contribute to the tackling of climate change. The ECJ ruled in favour of the Commission

⁷⁴ Friends of the Earth, Netherlands (Official Site), Amsterdam International Law Clinic, Faure, M., G. and Nolkaemper, A., Analysis of Issues to be Addressed – Climate Change Litigation Cases, Friends of the Earth Netherlands, Amsterdam, 2007, p.p.53-54, available at www.milieudefensie.nl/english, last visited 16 July 2010

⁷⁵ United Kingdom of Great Britain and Northern Ireland vs. Commission (T-178/05), 23 Nov 2005, available at www.curia.europa.eu, last visited 27 July 2010

⁷⁶ See Amsterdam International Law Clinic et. al., supra, note 74, p.p.50-51

⁷⁷ Commission vs. Council (C-176/03), available at www.curia.europa.eu, last visited 27 July 2010

⁷⁸ See Amsterdam International Law Clinic et. al., supra, note 74, p.p.49

⁷⁹ Commission v. Austria (320/03), available at www.curia.europa.eu, last visited 27 July 2010

finding that the free movement of goods is more important than the protection of air quality.⁸⁰

Commission v. UK (C-6/04) and Commission v. Germany (C-98/03)81

Both cases refer to the application of the Habitats Directive⁸² and Member States failure to fulfil obligations therein.⁸³ In addition, these cases are perfect examples of the precautionary principle's application in the climate change litigation as, despite the uncertainty regarding the causal link between the emissions in question and the climate change, the ECJ ruled in favour of the protection of the habitats. Precaution of the ECJ lies in the fact that the risk of climate change and the risk of danger for the species in the protected areas exist unless it is excluded "based on the objective information".⁸⁴

3. APPLICABILITY OF THE ENVIRONMENTAL LIABILITY DIRECTIVE (THE "ELD")

3.1. ELD - HISTORICAL BACKGROUND AND BASIC PRINCIPLES

Environmental Liability Directive (the "ELD) is the product of the EU attempts to create a comprehensive regime on the environmental liability.⁸⁵ The intention was to avoid adopting multiple acts regulating liability with respect to the particular area of the EU environmental policy. Instead, the new directive was supposed to have a horizontal perspective and regulate environmental liabilities in general.⁸⁶

The forerunners of the ELD were the (i) Green paper on Remedying Environmental Damage and the (ii) White Paper on Environmental Liability. ⁸⁷ White Paper's aim was to cover (i) *traditional damage* (i.e. damage to somebody's property, economic loss or personal injury) generally regulated under the civil law system of the Member States, and the (ii) *environmental damage* generally not regulated by the national legal systems of the Member States. The content and solutions of

⁸⁰ See Amsterdam International Law Clinic et. al., supra, note 74, p.p.50-51

 $^{^{81}}$ Commission v. UK (C-6/04) and Commission v. Germany (C-98/03), both available at www.curia. europa.eu, last visited 27 July 2010

⁸² Council Directive 92/43/EEC on the conservation of natural habitat and of wild flora and fauna OJ L 206, adopted on 21 May 1992, entered into force on 22 July 1992, p.p.7-50 (Habitats Directive)

⁸³ The obligation in German case was regarding the authorizations of emissions in the special areas of protection (the "SAP"). *See* Amsterdam International Law Clinic et al., supra, note 74, p.p.51

⁸⁴ See, Amsterdam International Law Clinic, et al., supra, p.p.51-52

⁸⁵ See Hinteregger, supra, note 70, p.p.6

⁸⁶ Justice and Environment, European Network of International Law Organizations (Official site), Environmental Liability – Legal Analysis, 2007, p.p.3, available at http://www.justiceandenvironment. org/wp-content/uploads/2008/01/eld-legal-analysis.pdf, last visited 26 July 2010

White Paper on Environmental Liability COM (2000)66, 09 February 2000, not published in the Official Journal, available at http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!Doc Number&lg=en&type_doc=COMfinal&an_doc=2000&nu_doc=66, last visited 26 July 2010

the final product (i.e. the ELD) differed from the propositions of the White paper. The idea of providing liabilities for both traditional and environmental damages was abandoned and the ELD was left to regulate the environmental damage only. As a consequence, the ELD has shifted from regulating liability under the civil law system to regulating liability under the administrative law system setting forth an administrative obligation of the competent public authorities to repair an impaired environment, instead of compensating someone's damage in money. This will prove to be a very important with respect to the climate change liabilities as very often the damage caused by climate change is exactly the traditional damage. Unfortunately, traditional damages are not covered by the ELD⁹¹ and the plaintiffs shall in that sense have to rely on the civil law and torts regimes of particular Member States, as well as on the Principles of European Tort Law. 92

Article 1 of the ELD along with its Preamble's point 2 determines the polluterpays principle as the basic principle used in the mitigating the environmental damage through prevention and respective remedies. The operator is responsible for undertaking prevention, remedial and managing measures with respect to the damage⁹³ and under the polluter-pays principle it bears the costs for such prevention and remediation.⁹⁴ Therefore, the polluter-pays principle along with the principles of sustainable development, cost-effectiveness, proportionality and subsidiarity as set forth in points 2 and 3 of the ELD's preamble constitute basic legal standards that are followed in the creation process of the environmental liability framework. 95 However, the polluter shall not be liable if he can prove that (i) the damage was caused by a third party, even if all precautionary measures were undertaken or that (ii) the damage arose from the compliance with an order issued by the competent authority unless the order was given after the occurrence of the damage caused by the operator's activities. 96 In addition, the Member States can also regulate exemption from operator's liability particularly when the emissions causing the damage are within the limits set forth within the authorization itself.⁹⁷ These examples can be defined as the exceptions from the application of the polluter-pays principle.

⁸⁸ Winter, G., Jans, H.,J., Macrory, R. and Krämer, L., *Weighing up the EC Environmental Liability Directive*, Journal of Environmental law, Volume 20, June 2008, p.p.163-164. Remedying of the environmental damage by way of restoration is considered to be an administrative act.

⁸⁹ See ELD, supra, note 9, Preamble, Point 14. Point 14 refers to the exclusion of the compensation of the traditional damage.

⁹⁰ See Winter et al., supra, note 88, p.p.2

⁹¹ See ELD, supra, note 9, Preamble, Point 14

 $^{^{92}}$ European Group on Tort Law, Principles of European Tort Law, 2005, available at http://www.egtl.org/principles/pdf/PETL.pdf, last visited 27 July 2010

⁹³ See Winter et al., supra, note 88, p.p.165

⁹⁴ See ELD, supra, note 9, Preamble, Point 18

⁹⁵ See ELD, supra, note 9, Preamble, Points 2 and 3 and Article 1

⁹⁶ See ELD, supra, note 9, Article 8(3)

⁹⁷ See ELD, supra, note 9, Article 8(4)

3.2. ELD IN CLIMATE CHANGE LITIGATION

Having in mind the text of the ELD as well as the particularities of the climate change causes, impacts and litigation, two provisions of the ELD that need to be marked as potential "red flags" are Articles 4.1(b) and 4.5, and Point 13 of the Preamble. The respective preamble's provision defines conditions for the application of the liability mechanisms. These are identification of (i) the polluters, (ii) the damage (type and quantity) and of (iii) the causal link between the two. Hence, the application of the ELD to determine climate change liability is burdened with the fact that the damages arising from climate change find its roots in the pollution of a diffusive character. Diffusive character makes it more difficult to establish the above identifications. However, the ELD will stilly apply in cases when the establishment of the causal link is possible, 98 and all other conditions are met.

According to the Article 4.1(b), the ELD shall not apply to the damages arisen from the "natural phenomenon of exceptional, inevitable and irresistible character". Claiming of the damage compensation in the climate change litigation very often occurs at the aftermath of a particular event. An example is the occurrence of Hurricane Katrina used in the current climate change litigation case. ⁹⁹ In case of the strict interpretation of the subject provision, the ELD would not be suitable legal basis for such climate change case as the Article 4.1(b) would exclude it for the application. However, there is a difference between the climate and the weather ¹⁰⁰ and one weather event. Hurricane Katrina could therefore be defined (i) not as one exceptional occurrence per se but as part of the much longer, very systematic process of global warming, (ii) not as natural element but as something induced by humans and (iii) not as an inevitable event as it could have been avoided had the proper measures for tackling the climate change been applied. Such interpretation of the nature of Hurricane Katrina keeps the doors towards the application of the ELD in cases with similar background open. ¹⁰¹

Apart from the above mentioned "red flags", the ELD's suitability for its application in the climate change litigation is further burdened with the limitations in terms of scope of application, time and territorial application, and types of remedies predicted. These will be discussed in the following sections.

⁹⁸ See ELD, supra, note 9, Article 4.5. Difficulties specific to the identification of the causation link will be discussed later in the chapter.

⁹⁹ See Comer vs. Murphy Oil in Chapter 2.3.2. of the paper.

Allen, M., Liability for Climate Change – Will it ever be possible to sue anyone for damaging the climate?, Nature, Volume 421, 27 February 2003, p.p. 891, available at www.nature.com/nature, last visited 15 June 2010

¹⁰¹ See Winter et al., supra, note 88, p.p.167

3.2.1. ELD – Scope of Application, Liability Scheme, Causation and Multiple Parties

Scope of Application

One of the added values of the ELD is the introduction of the liability for the environmental damage. 102 Environmental damage is defined in the Article 2 of the ELD as the damage caused to the protected species and natural habitats, 103 water and land. 104 ELD does not regulate traditional damage. 105 However, as the traditional damage is very often a result of the global warming and reason for the plaintiffs to claim monetary compensation in the climate change cases (as in Native Village of Kivalina et al. vs. ExxonMobile Corp., et al. case) 106, application of the ELD in those circumstances and due to the limitations set forth in Article 2 is very limited.

Liability Schemes

ELD recognizes two liability schemes - *strict liability* i.e. ("objective liability") and *fault based liability* (i.e. "subjective liability"). ¹⁰⁷

Strict liability exists regardless of the fault or negligence of the defendant and applies with respect to the environmental damage caused by the occupational activities set forth in Annex III to the ELD. The activities also include operations regulated under the Council Directive 96/61/EC concerning Integrated Pollution Prevention and Control (the "IPPC")¹⁰⁸ which are subjects of the permits system. ¹⁰⁹ As the IPPC Directive's scope regulates many GHG emissions it can be concluded that the rules of strict liability shall apply in climate change litigation. ¹¹⁰ Such ELD's attitude towards the application of the strict liability is in line with the Principles of European Tort Law. ¹¹¹ Climate change is regularly caused by the GHG emissions for which the permit is required. ¹¹² The question that could arise

¹⁰² See Winter, supra, note 88, p.p.165

¹⁰³ Protected species and natural habitats are defined in the ELD. However, Member States are left to broaden the scope of the application. *See* ELD, supra, note 9, Article 2.1.3.

Land is considered environmentally damaged under the ELD only if the damage i.e. land contamination imposes significant risk to the people's health. See ELD, supra, note 9, Article 2.1(c). In addition, erosion is not considered as land contamination. Hence, it is not covered by the ELD. This is another limitation of the ELD's application in the climate change litigation since erosion of the land often results from melting of the ice and global warming. See Winter et al., supra, note 88, p.p.167

¹⁰⁵ See Winter, supra, note 88, p.p.165

¹⁰⁶ Plaintiffs' claims consisted of the requests for the (i) relocation of their village due to the rise of the sea level caused by emissions of GHG and (ii) monetary compensation in the amount between \$90 and \$400 mill. See, Native Village of Kivalina et al. vs. ExxonMobile Corp. et al., No. 08-cv-01138-SBA

¹⁰⁷ See Faure et al., supra, note 29, p.p.148

¹⁰⁸ Council Directive 96/61/EC, O.J. L 257, adopted on 24 September 1996, entered into force on 10 October 1996

¹⁰⁹ See ELD, supra, note 9, Annex III, Point 1

¹¹⁰ See Faure et al., supra, note 29, p.p.148

¹¹¹ Principles of European Tort Law predict strict liability for any extremely dangerous activity. *See* Principles of European Tort Law, supra, note 92, Article 5:101

¹¹² See, Faure et al., supra, note 29, p.p.148

in the climate change litigation is the question of using a regulatory compliance as an excuse from the liability. The ELD leaves the freedom to the Member States to allow the operator not to bear the costs for remedial measures in case of regulatory compliance. This means that the operator will be freed form bearing the costs if (i) he is not at fault or negligent and (ii) environmental damage was caused by emissions within the limits of the authorization or permit.¹¹³

Fault based liability is a liability applied to the environmental damage caused to the protected species and habitats by the activities other than the activities from Annex III to the ELD, but only if the damage was caused with fault or negligence. Liability shall in this case exist only if the plaintiffs manage to prove that the damage has been caused intentionally or with negligence or gross negligence.

Causation and Multiple Parties

Causation is the most difficult issue and the biggest challenge of the climate change litigation. It is the only thing that needs to be proven in the system with strict liability regime. Nevertheless, causation link between the activities such as emitting of GHG and the global warming, climate change, sea-level rise and permafrost melting is very difficult to prove for various reasons. These are mainly (i) diffuse character of the pollution causing the global warming or (ii) inability to trace polluting articles back to their particular source once they enter the atmosphere. This is very important for the climate change litigation where the claims are mostly directed against fossil fuel companies, car manufacturers or electricity producers. However, households are also very big contributors of the GHG. Inability to properly prove the cause and identify the polluter might be the reason for non application of the ELD, as identification of polluter and determination of the causation link is requirement under Point 13 of the ELD Preamble.

Climate change litigation implies multiple defendants and very often multiple plaintiffs. In addition, harm caused by climate change is indivisible as it is impossible or extremely difficult¹¹⁷ to prove who exactly caused which part of the damage. The ELD does not provide for the solution as it leaves to the Member States to deal with the issue by allowing them to decide on the allocation of costs in case of multiparty causation.¹¹⁸ Kivalina plaintiffs use the theory of strict, joint and several liabilities according to which all emitters of the GHG are liable unless

¹¹³ See ELD, supra, note 9, Article 8.4

¹¹⁴ See ELD, supra, note 9, Article 3.1.(b)

¹¹⁵ See Maag, supra, note 27, p.p.186

¹¹⁶ Please see Chapter 3.2 above.

Portion of harm might be determinable by using specific economic mechanisms and business records according to which the amount of liability shall be determined by the amount of the registered GHG emitted into the atmosphere or by the amount of the profit earned by the defendant in a year, within the specific region. *See*, Maag, supra, note 27, p.p. 197

¹¹⁸ See ELD, supra, note 9, Article 9

the harm could be reasonably apportioned among the defendants.¹¹⁹ This basically means that (i) all GHG emitters could be held liable even if their emissions did not really contributed to the damage and that (ii) only some of the GHG emitters, the ones being sued, will be liable for the GHG emissions produced by the others also.¹²⁰ Needs to be said that the courts are trying to find a mechanism to resolve the issue of strict, joint and several liability so that the number of GHG emitters that could be held liable is decreased, and that particular groups of the GHG emitters (e.g. households) are exempted from the liability.¹²¹

3.2.2. ELD - Territorial Scope and Temporal Application Territorial Scope

Climate change causes transboundary damages. Territorial scope of the ELD is limited to the European Union. Most of the biggest polluters today are stationed outside of the EU territory. The greatest number of the potential defendants in the climate change litigation is also located outside of the EU. Nevertheless, the ELD could be applicable in climate change litigation in cases in which an EU state, for example, fails to reach its target from Kyoto Protocol and becomes potentially liable and subjected to the lawsuit from non European entity. 122

Temporal Application

Temporal application of the ELD is determined within its Article 17. It defines the exemptions from the application of the ELD. These exemptions refer to the (i) damage generated from an event that occurred prior to 30 April 2007 (which is the final date for the implementation of the ELD into the national legal systems of the climate change), (ii) damage generated from an event that happened after 30 April 2007 but was caused by a particular activity undertaken prior to that date, and to the (iii) damage generated by an action occurring more than 30 years before the damage occurred.¹²³

The issue of temporal application of the ELD in relation to the climate change litigation is very specific. Lots of time may pass before the damage from climate change actually occurs. Having the above mentioned date in mind, the damage for which the plaintiff has filed a claim is most probably consequence of the emissions from after but also from before the subject date. Under the ELD, the defendants can be liable exclusively for the damage generated from the actions occurring after the 30 April 2007. This means that the application of the ELD in the climate change litigation at the moment should be extremely low. Even if somebody tries to apply it he will have difficulties in proving that the damage occurred as the

¹¹⁹ See Maag, supra, note 27, p.p.188

¹²⁰ See Maag, ibid, p.p.186

 $^{^{121}}$ For a more detailed information on the line-drawing mechanisms please see Maag article, supra note 27, p.p.189-196.

¹²² See Faure et al., supra, note 29, p.p.147-148

¹²³ See ELD, supra, note 9, Article 17

consequence of the actions undertaken after the subject date.

3.2.3. ELD -Remedies

Regular remedies claimed for in the climate change litigation are monetary compensation, declaratory relief and injunctive relief. The last one is particularly interesting to the public nuisance climate change cases. However, injunctive relief might not be enough as when the damage to the property occurs the plaintiffs regularly seek for the compensation in money.¹²⁴

Article 3.3 of the ELD explicitly states that the plaintiffs will not have a right to compensation due to the environmental damage suffered or due to the imminent threat of such damage. This basically means that the ELD does not recognize monetary compensation. Nevertheless, it leaves to the Member States possibility for different regulation. 125

Annex II of the ELD divides remedial measures into two main groups: (i) the one referring to the damage done to the water, natural habitats and protected species and (ii) the other one, the damage caused to the land i.e. contamination of the land. The first group recognizes three types of remedial measures that do not involve monetary compensation and whose primary purpose is the restoration of the environment to the baseline of the ecological and other respective status. Complete restoration is called "primary restoration". If full/primary restoration is not possible, the ELD predicts "complementary remediation" whose aim is to assure level of status of natural resources similar to the baseline level. This one sometimes might include establishment of natural resources of similar characteristics at an alternative sight. The third type of remedial measures is "compensatory remediation" which implies compensation for interim losses suffered due to inability (i) to achieve full ecological functions of the damaged natural resource or (ii) to provide services to other natural resources or public. Public will never receive financial compensation. ¹²⁶ Remedial measure for the contamination of land implies obligation to mitigate, remove and/or monitor the contaminants with obligation to ensure that no current (i.e. at the time of defining remedial measure) or future risk of such contamination or of the negative effects to the human health shall arise. 127

The above shows that when the plaintiffs wish to seek monetary compensation from the defendants, such compensation will not be achievable through application of the ELD. However, the ELD has other specific measures that can be undertaken such as preventive actions when the damage has not yet occurred. 128

¹²⁴ See Cofre et al., supra, note 3, p.p.256

¹²⁵ See ELD, supra, note 9, Article 3.3

¹²⁶ See ELD, supra, note 9, Annex II, Article 1

¹²⁷ See ELD, supra, note 9, Annex II, Article 2

¹²⁸ See, ELD, supra, Article 8

4. ELD AND CLIMATE CHANGE LITIGATION – CROATIAN EXPERIENCE

Being a candidate country for joining the community of European Union, Croatia is obliged to harmonize its laws with the laws of the EU. This implies the implementation of the EU directives into the Croatian legislative and regulatory regime. The aim of this chapter is not to analyse the level of implementation of the ELD or other European legislation that could directly or indirectly be associated with the climate change issues. Nevertheless, according to the "Croatia 2009 Progress Report" and in particular Chapter 27 - the "Environment", the ELD has still not been implemented in full. On the other hand, activities in the area of climate change are non negligible. Important steps have been made in relation to the (i) adoption of the GHG allowances for the period of 2010-2012, (ii) implementation of legislation regarding mechanisms from Kyoto Protocol and (iii) actions related to the Emission Trading Schemes (the "ETS"). ¹³⁰ All this shows raised awareness on the importance of the climate change issues in Croatia.

4.1 ELD AND CROATIAN ENVIRONMENTAL PROTECTION ACT

The main Croatian legislative instrument used for the implementation of the ELD is the Croatian Environmental Protection Act (the "CEPA"). 131 CEPA, as well as the ELD, by using polluter-pays principle sets forth obligation of the operator (i.e. the company; Croatian "Tvrtka") to bear the costs associated with the remediation of the environmental damage. CEPA's definition of the environmental damage (Croatian: "Šteta u okolišu") is a broader than in the ELD. It refers to the protected species and habitats, water and land but also, unlike the ELD, to the sea and Earth's crust. 132 Both acts recognize two schemes of liabilities: (i) strict liability and (ii) liability based on the fault and negligence. However, CEPA does not make the distinction between the two by enumerating the activities as does the ELD, but rather just by tying strict liability with "dangerous" activities. 133 However, it does anticipate obligation of the Croatian Government to further specify dangerous activities within the by-laws. 134 Further on, unlike the ELD (which leaves this possibility to the member states) CEPA explicitly predicts application of the joint and several liabilities when more than one operator

Ministry of the Environmental Protection and Spatial Planning (Official Site), Commission Staff Working Document, Croatia 2009 Progress Report, SEC (2009) 1333, Brussels, 14 October 2009, available at http://www.eu-pregovori.hr/files/Izvijesce/Progress_report_2009.pdf, last visited 29 July 2010

¹³⁰ See Progress Report, ibid, p.p.61

¹³¹ Environmental Protection Act, Official Gazette no. 110/07, adopted on 03 October 2007, entered into force on 02 November 2007, available at http://narodne-novine.nn.hr/clanci/sluzbeni/2007_10_110_3226. html, last visited 15 July 2010

¹³² See CEPA, ibid, Article 3, Point 50

¹³³ See CEPA, supra, note 131, Article 150

¹³⁴ See CEPA, supra, note 131, Article 150(4)

causes the damage. 135 The provisions of CEPA regulating exceptions from the operator's liability correspond to those of the ELD. 136 The same applies to the provisions determining the local authorities as entities entitled to file the claim for the compensation of damage. 137 With respect to the damage compensation for personal injury, damage to the property or economic loss, CEPA explicitly predicts application of the provisions of Croatian Obligations Act¹³⁸ whereas the ELD does not. 139 Finally, the most important difference between the ELD and CEPA lies in the Article 156(2) of CEPA according to which in cases when the full restoration or partial remediation is not possible, an operator shall be liable to compensate the damage in money, in the amount equivalent to the economical and ecological value of the damaged environment. The ELD expressly states that the compensation of the damage - "primary remediation", "complementary remediation" or "compensatory remediation" - does not imply compensation in money. 140 According to Annex II Point 1.1, the purpose of complementary damage is to provide similar environment, and the compensatory damage implies undertaking of the "additional improvements" and not money compensation to the members of public.

4.2 LEGAL FRAMEWORK FOR CLIMATE CHANGE LITIGATION

The author is not aware of any case currently pending before the Croatian courts that could be characterized as a climate change litigation case. ¹⁴¹ Nevertheless, Croatia has a legal framework that can be used as legal basis for the climate change litigation just as the existing legal framework is used in the US or at the European Union level. In addition, Draft of the Croatian National Strategy for Energy Development sets forth an important principle recognizing obligation for integration of goals and environmental protection measures and national politics for mitigating climate change impacts. ¹⁴²

¹³⁵ See CEPA, supra, note 131, Article 152(1)

¹³⁶ See CEPA, supra, note 131, Article 153, ELD, supra, note 9, Articles 4 and 8

¹³⁷ See CEPA, supra, note 131, Article 157, ELD, supra, note 9, Article 12

¹³⁸ Croatian Obligations Act, Official Gazette no. 35/05, adopted on 25 February 2005, entered into force on 01 January 2006, amended by Official Gazette no. 41/08, available at http://narodne-novine.nn.hr/default.aspx, last visited 28 July 2010

¹³⁹ See ELD, supra, note 9, Preamble, Point 14 and Article 3(3). See CEPA, note 131, Article 158. Croatian Obligations Act would, with respect to this particular issue of the damage compensation under the civil liability act as a lex specialis.

¹⁴⁰ The purpose of (i) complementary damage is to provide environment similar to the impaired one, and of (ii) compensatory damage, the undertaking of "additional improvements" and not money compensation to the members of public. *See*, ELD, Annex II, Point 1 According to Annex II Point 1.1,

¹⁴¹ According to the relevant Croatian legislation, civil law procedural cases are secretive and only after the fully final and valid court judgement is made the case summary can be published as part of the court practice. The publishing is usually done by the Croatian Supreme Court.

¹⁴² Draft of the Croatian National Strategy for Energy Development (the Green Book), a draft presented by the Croatian Ministry of the Economy on 10 November 2008 (p.p.4-5), purpose of which is the adjustment of the Croatian National Strategy for Energy Development, Official Gazette 38/2002, adopted on 19 March 2002, available at http://www.energetska-efikasnost.undp.hr/attachments/181_

The environmental protection in Croatia is envisaged within the Constitution of the Republic of Croatia which guarantees to the citizens the right to healthy environment and their obligation to care about people's health, nature and the environment. Soft laws dealing with issues of the environment protection are Croatian Declaration on the Environmental Protection, National Strategy for Environmental Protection and National Plan on Actions on the Environment. Actions causing damage to the environment that could cause climate change are sometimes criminal actions and as such are regulated within Croatian Criminal Act. 145

More importantly Croatian legal framework contains numerous legal acts that fall within civil law liability regime, some of which contain provisions potentially applicable to the climate change litigation in Croatia. These are CEPA, Nature Protection Act¹⁴⁶, Water Act¹⁴⁷ and Air Act.¹⁴⁸ Besides the above mentioned ecological legislation, acts of more general nature such as Act on Ownership and other Real Rights¹⁴⁹ and Croatian Obligations Act also contain provisions that can be used in the climate change litigation. This particularly refers to the nuisance claims and provisions regulating neighbouring rights. Regular measures petitioned within such claims are injunctive relieves.¹⁵⁰

5. CONCLUSION

Climate change litigation is always very demanding as the stakes of the parties involved are rather high. The proceedings are very time-consuming and extremely expensive due to the lawyers' fees and collection of evidence procedures. Apart

Nacrt%20Energetske%20Strategije%20_Zelena_knjiga_101108.pdf, last visited 28 July 2010

¹⁴³ Constitution of the Republic of Croatia, Official Gazette 56/1990, adopted on 22 December 1990, last amendment Official gazette NN 76/2010, clean version available at http://narodne-novine.nn.hr/clanci/sluzbeni/232289.html, last visited 28 July 2010

¹⁴⁴ Croatian Declaration on the Environmental Protection, Official Gazette 34/1992, adopted on 05 June 1992, available at http://www.infolex.hr/htm/3979.htm, last visited 28 July 2010

¹⁴⁵ Croatian Criminal Act, Official Gazette no. 110/97, adopted on 19 September 1997, entered into force on 01 January 1998, available at http://narodne-novine.nn.hr/default.aspx. The examples of Criminal actions that could be applied with respect to the climate change issues are: "causing of damage to the environment", and "causing of damage to the environment by devices"

¹⁴⁶ Nature Protection Act, Official Gazette no. 70/05, adopted on 27 May 2005, entered into force on 16 June 2005, available at http://narodne-novine.nn.hr/clanci/sluzbeni/2005_06_70_1370.html, amendments Official Gazette no. 139/08 adopted on 21 Nov 2008, entered into force on 11 December 2008, available at http://narodne-novine.nn.hr/clanci/sluzbeni/2008_12_139_3887.html, last visited 28 July 2010

¹⁴⁷ Water Act, Official Gazette no. 153/09, adopted on 21 December 2009, entered into force on 01 January 2010, available at http://narodne-novine.nn.hr/default.aspx, last visited 28 July 2010

¹⁴⁸ Air Act, Official Gazette no. 178/04, adopted on 16 December 2004, entered into force on 24 December 2004, last amendment Official Gazette 90/10, available at http://narodne-novine.nn.hr/default.aspx, last visited 28 July 2010

¹⁴⁹ Act on Ownership and other Real Rights, Official Gazette 91/96, adopted on 28 October 1996, 01 January 1997, last amendment Official Gazette 90/10, avaliable at http://narodne-novine.nn.hr/default.aspx, last visited 28 July 2010.

¹⁵⁰ See Croatian Obligations Act, supora,note 138, Article 1047

from these practical obstacles plaintiffs encounter legal hurdles which relate primarily to the issues of standing and causation, large number of plaintiffs and defendants, available remedies, etc. Probably the hardest hurdle to deal with is determination of the causation link.¹⁵¹

The previous presentation of the U.S. cases has shown that the U.S. courts tend to recognize the standing of the plaintiffs' even in case of a lack of a complete scientific certainty. However, there are examples that prove otherwise. On 30 September 2009, the U.S. District Court in California in the already mentioned case of Kivalina vs. ExxonMobile has dismissed the case due to the lack of the standing and the political question doctrine. This proves that the practice between different courts is still not unified. Regardless of the outcome of the above described cases, climate change litigation is very important as it replaces a highly needed climate change related political action in the U.S. And at the same time imposes great burden on the current or future defendants.

Further on, the similar presentation of climate change cases at the EU level shows that the ECJ brings decisions in line with the rules of EU laws and in accordance with the highest standards applicable to the EU litigation and EU policies. The example is the case in which the court allowed the Member States to increase the amounts of emission allowances which is basically a decision of a strict application of the EC rules that are not in favour of the environment protection. ¹⁵⁵

ELD is not often used in the climate change litigation, the reasons being the limitations of its application in the climate change cases. Those limitations primarily refer to the scope of application, requirements for the polluter's identification, particularities regarding the territorial and temporal scope and the available remedies, nature of the plaintiffs, etc. The conclusion is that the ELD is not the highly adequate tool for the climate change litigation and that it should be appropriately amended in order to become a proper legal instrument for regulation of the civil liability.

Despite the hurdles encountered therein, climate change litigation will continue to develop and will continue to put pressure on the legislative bodies, economic subjects involved in the actions that directly or indirectly contribute to the global warming, and other stakeholders. Risk of being sued in the climate change litigation case will make the stakeholders "think twice" before deciding (i) not to become members of the international conventions that regulate impacts on the climate change, or (ii) not to properly regulate emissions contributing to

¹⁵¹ See Grossman, supra, note 17, p.p.5-7

¹⁵² Kivalina vs. ExxonMobile, supra, note 106, p.p.24, available at http://www.climatelaw.org/cases/country/us/cases/case-documents/us/kivalina.dismissed.pdf, last visited on 29 July 2010

¹⁵³ See Grossman, supra, note 17, p.p.6

¹⁵⁴ See Bloomberg Law Reports, supra, note 51, p.p.5

¹⁵⁵ Please, see description of the case United Kingdom of Great Britain and Northern Ireland v. Commission (T-178/05) under chapter 2.4.2.

the global warming, or (iii) not to bend to the rules of climate change legislation. Nevertheless, the major battle will still have to be fought in the political arena and before the legislative rather than the judicial bodies.

ABBREVIATIONS

AEP American Electric Power Company Inc.

CAA Clean Air Act

CEPA Croatian Environmental Protection Act

Connecticut vs. AEP

Ned Comer et al. vs. Murphy Oil U.S.A. Inc., et al.

State of Connecticut et al. vs. American Electric

Power Company Inc.

CO₂ Carbon Dioxide

EC European Commission
ECJ European Court of Justice

EIA Environmental Impact Assessment
ELD EU Environmental Liability Directive
EPA Environmental Protection Agency

ETS Emission Trading Schemes

EU European Union
GHG Greenhouse Gasses

ICTA International Centre for Technology Assessment
IPCC Intergovernmental Panel on Climate Change
IPPC Directive Council Directive concerning Integrated

Pollution Prevention and Control

Kivalina vs. Exxon Mobil Native Village of Kivalina et al. vs.

ExxonMobile Corp. et al.

Kyoto Protocol Protocol to the UN Framework Convention on

Climate Change

Lugano Convention Convention on Civil Liability for Damage

Resulting from Activities Dangerous to the

Environment

Massachusetts vs. EPA State of Massachusetts et al. vs. Environmental

Protection Agency et al.

NEPA National Environmental Policy Act

UK United Kingdom of Great Britain and Northern

Ireland

UNFCCC United Nations Framework Convention on

Climate Change

U.S. United States of America

White Paper on the Environmental Liability

PRIMJENA EU DIREKTIVE O ODGOVORNOSTI ZA ŠTETU U OKOLIŠU U PARNICAMA VEZANIMA ZA POSLJEDICE KLIMATSKIH PROMJENA

Ured američkog predsjednika George W. Busha je 2001. godine u potpunosti napustio mogućnost usvajanja Kyoto Proktokola. Ovo, zajedno s nedostatkom primjerene politike i zakonodavstva potrebnog za rješavanje pitanja globalnog zatopljenja, uz prisutne posljedice klimatskih promjena, uzrokovale su pomicanje kreiranja odgovorajuće legislative sa zakonodavne i izvršne vlasti na sudove, doprinoseći tako važnom razvoju parničenja vezanog za klimatske promjene. Predmetno parničenje nije samo američki već i svjetski fenomen. Moguće ga je pronaći i u Europi, i to unatoč činjenici postojanja naprednih pravnih režima za zaštitu okoliša i klimatske promjene. Međutim, vjerodostojnost ove izjave je upitna, posebno kada se uzme u obzir nivo učinkovitosti i primjene Europske Direktive za odgovornost za štete u okolišu (EU Environmental Liability Directive -Direktiva) u parnicama vezanima za klimatske promjene. Naime, Direktiva ne predstavlja potpuni i sveobuhvatni režim odgovornosti kojim bi se osigurala adekvatna regulativa za odgovornosti proizišle iz područja zaštite okoliša. Neki su mišljenja da bi se Direktiva trebala zvati Environmental Responsibility Directive (Napomena: Engleski jezik pravi razliku između rječi "liability" i "responsibility"). Cilj ovog članka je utvrditi nivo adekvatnosti primjene Direktive u parnicama vazanima za klimatske promjene, njezine limite u takvoj primjeni i potencijalne probleme. U tu svrhu, autor ispituje postojeći pravni režim kao i slučajeve parničenja vezanog za klimatske promjene u SAD-u, ali i na nivou Europske Unije. Članak završava kratkom studijom parničenja vezanog uz klimatske promjene i postojeći pravni režim u Hrvatskoj (uključujući i samu Direktivu). Konačni zaključak je da je mogućnost primjene Direktive u parnicama vezanima za klimatske promjene ograničena.

Ključne riječi: EU, direktiva za odgovornost štete u okolišu, pravni režim u Hrvatskoj

BIBLIOGRAPHY

1. Primary Sources

1.1 Treaties

Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment, 32 I.L.M. 1228, adopted 21 June 1993

Protocol to the Framework Convention on Climate Change (Kyoto), 37 ILM (1998J) 22, entered into force 16 February 2005

United Nations Framework Convention on Climate Change, 31 ILM (1992) 851, entered into force 21 March 1994

1.2 EC Directives

Council Directive 96/61/EC concerning Integration Pollution and Control, O.J. L 257, adopted on 24 September 1996, entered into force on 10 October 1996

Council Directive 92/43/EEC on the conservation of natural habitat and of wild flora and fauna OJ L 206, adopted on 21 May 1992, entered into force on 22 July 1992, p.p.7-50 (Habitats Directive)

Directive 2004/35/CE of the European Parliament and of Council on environmental liability with regard to the prevention and remedying of environmental damage, L 143/56, adopted on 21 April 2004, entered into force on 30 April 2004, amended by Directive 2006/21/EC, OJ L 102, adopted on 11 April 2006, entered into force 01 May 2006

1.3 National legislation

Act on Ownership and other Real Rights, Official Gazette 91/96, adopted on 28 October 1996, 01 January 1997, last amendment Official Gazette 90/10, avaliable at http://narodne-novine.nn.hr/default.aspx, last visited 28 July 2010.

Air Act, Official Gazette no. 178/04, adopted on 16 December 2004, entered into force on 24 December 2004, last amendment Official Gazette 90/10, available at http://narodnenovine.nn.hr/default.aspx, last visited 28 July 2010.

Clean Air Act, 42 U.S.C., § 7401

Constitution of the Republic of Croatia, Official Gazette 56/1990, adopted on 22 December 1990, last amendment Official gazette NN 76/2010, clean version available at http://narodne-novine.nn.hr/clanci/sluzbeni/232289.html, last visited 28 July 2010

Croatian Criminal Act, Official Gazette no. 110/97, adopted on 19 September 1997, entered into force on 01 January 1998, available at http://narodne-novine.nn.hr/default.aspx.

Croatian Obligations Act, Official Gazette no. 35/05, adopted on 25 February 2005, entered into force on 01 January 2006, amended by Official Gazette no. 41/08, available at http://narodne-novine.nn.hr/default.aspx

Environmental Protection Act, Official Gazette no. 110/07, adopted on 03 October 2007, entered into force on 02 November 2007, available at http://narodne-novine.nn.hr/clanci/sluzbeni/2007_10_110_3226.html

Nature Protection Act, Official Gazette no. 70/05, adopted on 27 May 2005, entered into force on 16 June 2005, available at http://narodne-novine.nn.hr/clanci/sluzbeni/2005_06_70_1370.html, amendments Official Gazette no. 139/08, available at http://narodne-novine.nn.hr/clanci/sluzbeni/2008_12_139_3887.html

Water Act, Official Gazette no. 153/09, adopted on 21 December 2009, entered into force on 01 January 2010, available at http://narodne-novine.nn.hr/default.aspx, last visited 28 July 2010

1.4 International/Supranational/National Soft Law

Croatian Declaration on the Environmental Protection, Official Gazette 34/1992, adopted on 05 June 1992, available at http://www.infolex.hr/htm/3979.htm, last visited 28 July 2010

Draft of the Croatian National Strategy for Energy Development (the Green Book), a draft presented by the Croatian Ministry of the Economy on 10 November 2008 (p.p.4-5), purpose of which is the adjustment of the Croatian National Strategy for Energy Development, Official Gazette 38/2002, adopted on 19 March 2002, available at http://www.energetska-efikasnost.undp.hr/attachments/181_Nacrt%20Energetske%20 Strategije%20_Zelena_knjiga_101108.pdf, last visited 28 July 2010

European Group on Tort Law, Principles of European Tort Law, 2005, available at http://www.egtl.org/principles/pdf/PETL.pdf, last visited 27 July 2010.

1.5 Cases

Commission v. Austria (320/03), available at www.curia.europa.eu, last visited 27 July 2010

Commission vs. Council (C-176/03), available at www.curia.europa.eu, last visited 27 July 2010

Commission v. Germany (C-98/03) available at www.curia.europa.eu, last visited 27 July 2010

Commission v. UK (C-6/04) available at www.curia.europa.eu, last visited 27 July 2010

Native Village of Kivalina et al. vs. ExxonMobile Corp. et al., No. 08-cv-01138-SBA Ned Comer, et al. vs. Murphy Oil U.S.A. Inc., et al., 585 F.3d 855 (5th Cir. 2009)

State of Connecticut, et al. vs American Electric Power Company Inc., et al., 406 F. Supp 2d 265 (vacated and remanded by Connectucut vs. American Electric Power Co. Inc., 582 F.3d 309

State of Massachusetts et al. vs. Environmental Protection Agency et al., 127 S. Ct. 1438 (2007)

United Kingdom of Great Britain and Northern Ireland vs. Commission (T-178/05), 23 Nov 2005, available at www.curia.europa.eu, last visited 27 July 2010

2. Secondary Sources:

2.1. Books

Birnie, P., Boyle, A. and Redgwell, C., International Law & the Environment, Third Edition, Oxford University Press Inc., New York, 2009, p.p. 318

Cofre, A., J., Rock, N. And Watchman, Q P., *Climate Change Litigation*, in A Guide to Carbon Law and Practice, consulting editor Paul Q. Watchman, Globe Law and Business London, 2008 p.p.229

2.2. Articles

Allen, M., Liability for Climate Change – Will it ever be possible to sue anyone for damaging the climate?, Nature, Volume 421, 27 February 2003, p.p. 891, available at www.nature.com/nature, last visited 15 June 2010

Cullet, P., Liability and Redress for Human-Induced Global Warming: Towards an International Regime, Stanford Environmental Law Journal, Volume 26, 2007, p.p.114

Faure, G. M., & Nolkaemper, A., *International Liability as an Instrument to prevent and compensate for Climate Change*, Stanford Environmental Law Journal, Volume 26, 2007, p.p. 151-155

Grossman, A. D., Warming up to a Not-so-Radical Idea: Tort-based Climate Change litigation, Columbia Journal of Environmental Law, Volume 28, Issue 1, 2003, p.p.9-17

Gupta, J., Legal Steps Outside the Climate Convention: Litigation as a Tool to Address Climate Change, RECIEL Volume 16, Issue 1, 2007, p.p.76

Heinzerling, L., *Climate Change*, *Human Health*, *and the Post-Cautionary Principle*, The Georgetown Law Journal, Volume 96, 2007-2008, p.p.457

Maag, B., K., Climate Change Litigation: Drawing Lines To Avoid Strict, Joint and Several Liability, Georgetown Law Journal Volume 98, Issue 1, , November 2009, p.p.187

Winter, G., Jans, H., J., Macrory, R. and Krämer, L., Weighing up the EC Environmental Liability Directive, Journal of Environmental law, Volume 20, June 2008, p.p.163-164.

2.3. Other

Bloomberg Law Reports (Official Site), Carroll, C., M., et al., *Climate Change, Climate Change Liability and Defence, Comer and Insurance: Who Will End Up Paying?*, 28 May 2010, p.p. 2, available at http://www.mckennalong.com/media/site_files/1268_Carroll-Evans%20-%20BLR-Climate.pdf, last visited 25 July 2010

Cambridge University (Official Site), *Environmental Liability and Ecological Damage in European Law*, *Part 1 – Environmental Liability in Europe*, Hinteregger, M., ed., Cambridge University Press, p.p.3-4, available at www.cambridge.org, last visited 14 July 2010

Columbia Law School (Official Site), U.S. Climate Change Litigation Chart, 2010, available at http://climatecasechart.com, last visited 25 July 2010

Duke Law School (Official site), Salzman, J. and Hunter, D., *Negligence in the Air: The Duty of Care in Climate Change Litigation*, Research Paper Series, Research Paper no. 160, 2007, p.p.109, available at http://ssrn.com/abstract=991669, last visited 17 July 2010

European Union (Official Site), Europa, Summaries of EU Legislation, *Tackling Climate Change*, 2010, p.p.1, available at http://europa.eu/legislation_summaries/index_en.htm, last visited 26 July 2010

Friends of the Earth, Netherlands (Official Site), Amsterdam International Law Clinic, Faure, M., G. and Nolkaemper, A., *Analysis of Issues to be Addressed – Climate Change Litigation Cases*, Friends of the Earth Netherlands, Amsterdam, 2007, p.p.53-54, available at www.milieudefensie.nl/english, last visited 16 July 2010

Heinzerling, L., Climate Change in the Supreme Court, Georgetown University Law Center, Environmental Law, Volume 38, 2008, p.p.3, (an edited version of the 20th Annual Natural Resources Law Institute Distinguished Lecture, delivered on 03 October 2007 at Lewis and Clarke Law School), available at http://ssrn.com/abstract=1087385, last visited 17 March 2010

Justice and Environment, European Network of International Law Organizations (Official site), Environmental Liability – Legal Analysis, 2007, p.p.3, available at http://www.justiceandenvironment.org/wp-content/uploads/2008/01/eld-legal-analysis.pdf, last visited 26 July 2010

Ministry of the Environmental Protection and Spatial Planning (Official Site), Commission Staff Working Document, *Croatia 2009 Progress Report*, SEC (2009) 1333, Brussels, 14 October 2009, available at http://www.eu-pregovori.hr/files/Izvijesce/Progress_report_2009.pdf, last visited 29 July 2010

Munich RE, Liability for Climate Change, Experts' views on a potential emerging risk, *Climate-Change litigation: American Phenomenon or Global trend?*, Interview with Paulino Fajardo at Davies Arnold Cooper, March 2010, p.p.19, available at http://www.munichre.com/en/profile/focus/climate_change/default.aspx, last visited 17 July 2010

University of Denver, Sturm College of Law (Official site), U.S. Climate Change Litigation Chart: Excellent Resource for Following "Progress" in U.S.-based Lawsuits, April 20, 2010, available at http://enrlgp.blogspot.com/2010/04/us-climate-change-litigation-chart.html, last visited 25 July 2010

White Paper on Environmental Liability COM (2000)66, 09 February 2000, not published in the Official Journal, available at http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!DocNumber&lg=en&type_doc=COMfinal&an_doc=2000&nu_doc=66, last visited 26 July 2010