

ARTICLES

Special Section – Regulatory Competition in the EU: Foundations, Tools and Implications

edited by Francesco Costamagna

DO ENVIRONMENTAL RULES AND STANDARDS AFFECT FIRMS' COMPETITIVE ABILITY?

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ABSTRACT: The *Article* considers whether EU environmental standards are relevant for the competitiveness of our firms and analyses this phenomenon under the lenses of EU law and case-law as developed through the decades. Starting from the first environmental rules adopted by the EEC prior to the conferral of competences in this field by the Member States to the Community in order to remove "non-tariff barriers" to trade within the (old) common market, the analysis moves to the implications for EU firms of EU environmental standards as they have been established within the EU environmental policy and consistently with the goal of a high level of environmental protection within the EU. The analysis seems to show that within the EU a race to the bottom never occurred; on the contrary, the EU comprehensive legislation on environmental purposes based on the duty to comply with high environmental standards has improved EU firms' competitiveness in the global markets. Given these results, the author welcomes recent EU initiatives aimed at adopting unilateral "extraterritorial" environmental standards applicable to non-EU firms engaged in trade with the EU, or to negotiate high environmental standards within trade agreements executed between the EU and third countries.

KEYWORDS: competitive regulation – environmental protection – European Union – international trade free trade agreements – WTO.

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I. THE ECONOMIC BACKGROUND

The enactment of any rule, because of its intrinsic nature, modifies or constraints behaviours compared to the previously existent legal environment. In order to comply with this rule, its addressees must therefore change the patterns of their activities to adapt them to the regime it sets out: in other words, any rule normally sets standards of behaviours to their addressees that become mandatory (or recommended) upon the entry into force of this rule.

Rules are often introduced to improve previously existing standards: for instance, the increase of data protection treatment for better safeguarding individual rights in the "big data" era, or the reduction of greenhouse gases emissions by vehicles. When such phenomena take place, addressees of these rules must undergo an adaptation process of their past behaviours, and this often entails the need to carry out investments or sustain expenses. If only some persons are the addressees of this rule, which leaves other persons unaffected, only the former are subject to the need to change their conducts or past practices. If these persons are firms operating in the same market, this rule will therefore introduce a relative variation in the competitive environment affecting them.

Economists have extensively debated the impact of regulation on firms' ability to compete, and have analysed this phenomenon under different viewpoints: the interindividual level, the industry-level, as well as, within a transnational context, the domestic level *vis-à-vis* other States' economies.¹

Many areas of law have been investigated and, among the most celebrated ones, the environmental one is surely at the forefront, in particular with regard to environmental regulation. While it is certain that any human activity has an impact on the envi-

¹ For a general overview, and for further bibliographic references, see J. BHAGWATI, R.P. HUDEC (eds), Fair Trade and Harmonization: Prerequisites for Free Trade, Vol. 1, Cambridge and London: MIT Press, 1996; J.D. Wilson, Theories of Tax Competition, in National Tax Journal, 1999, p. 269 et seg.; E. Wubben, What's in it for Us? Or: The Impact of Environmental Legislation on Competitiveness, in Business Strategy and the Environment, 1999, p. 95 et seq.; W.E. OATES, A Reconsideration of Environmental Federalism, in Resources for the Future Discussion Paper, no. 54, 2001, available at pdfs.semanticscholar.org; J. URPELAINEN, Regulation Under Economic Globalization, in International Studies Quarterly, 2010, p. 1099 et seq.; E. Williams, K. Macdonald, V. Kind, Unravelling the Competitiveness Debate, in European Environment, 2002, p. 284 et seq. More focussed on environmental competitive regulation are the works by D.C. ESTY, M.E. PORTER, Industrial Ecology and Competitiveness, in Journal of Industrial Ecology, 1998, p. 35 et seq.; A. LEVINSON, Environmental Regulatory Competition: A Status Report and Some New Evidence, in National Tax Journal, 2003, p. 91 et seq.; D.M. Konisky, Regulatory Competition and Environmental Enforcement: Is There a Race to the Bottom?, in American Journal of Political Science, 2007, p. 853 et seg.; F. IRALDO, F. TESTA, M. MELIS, M. FREY, A Literature Review on the Links Between Environmental Regulation and Competitiveness, in Environmental Policy and Governance, 2011, p. 210 et seg.; T. Kozluk, V. Zipperer, Environmental Policies and Productivity Growth A Critical Review of Empirical Findings, in OECD Journal Economic Studies, 2015, p. 155 et seq.; V. Heyvaert, Regulatory Competition Accounting For the Transnational Dimension of Environmental Regulation, in Journal of Environmental Law, 2013, p. 1 et seq.

ronment (i.e. bears an environmental footprint),² it goes without saying that also environmental rules and standards have an impact on firms' behaviours. Therefore, especially in an open or globalised market perspective, the evaluation of such an impact is essential for policymakers.

The scope and limits of this *Article* do not allow a thorough economic analysis on regulatory competition in the environmental sector; rather, this short essay is focussed exclusively on the inter-State (or inter-regional) viewpoint. From this viewpoint, three options are essentially debated among economists.

The first one, also known as the neo-classical approach, assumes that in an open market situation, firms will be negatively affected by the adoption of environmental regulations, i.e. rules that enhance environmental standards for firms operating in a given legal system which competes with other firms subject to other and more relaxed standards; this will eventually determine a race to the bottom situation: unless harmonised environmental rules creating universal standards have been agreed among all legal systems whose firms compete in the same markets, those systems enjoying lower environmental standards will cause their firms to be more competitive compared to the peers located in States having more stringent environmental legislations.³

A second view (also known as the "revisionist" one) implies on the contrary that the enactment of rules introducing tighter environmental standards will produce a race to the top effect: more precisely, firms that are addressees of these rules will eventually be given a competitive advantage *vis-à-vis* their competitors who are not subject to these rules, mainly due to the need of the former to enhance technology to meet the new standards and produce superior qualitative output which, in the end, is preferred by buyers/consumers worldwide. Also known as the "Porter Hypothesis", named after the economist who has developed it,⁴ this theory has obvious implications for enhancing environmental standards while at the same time fostering the overall competitiveness of a national or regional economy.

A third approach is the "resource-based view", taking a more cautious stance: in particular, it advocates that the outcome of an environmental regulation on the firms' competitive ability will eventually depend on the measures that lawmakers use; there-

² In addition to the authors quoted above, footnote 1, see F. Munari, L. Schiano di Pepe, *Tutela transnazionale dell'ambiente*, Bologna: Il Mulino, 2012, p. 12 and *passim*, P. Ficco, *Il Rapporto tra ambiente e competitività. L'impatto sulle attività delle imprese*, in *Amministrazione in cammino*, 2005, p. 1 *et seq*.

³ Cf. e.g. W. Gray, R. Shadbegian, *Plant Vintage, Technology, and Environmental Regulation*, in *Journal of Environmental Economics and Management*, 2003, p. 384 *et seq.*

⁴ M.E. Porter, *America's Green Strategy*, in *Scientific American*, 1991, p. 168 *et seq.*; M.E. Porter, C. Van der Linde, *Green and Competitive: Ending the Stalemate*, in *Harvard Business Review*, 1995, p. 120 *et seq.*; M.E. Porter, C. van der Linde, *Toward a New Conception of the Environment Competitiveness Relationship*, in *Journal of Economic Perspectives*, 1995, p. 97 *et seq.*

fore, before advancing general conclusions, one should carry out a more sophisticated analysis concerning the implications of any such measure.⁵

Neither of the three alternatives above seems clearly prevailing in the economic literature, and in fact no decisive evidence seems to exist showing that environmental costs are an important factor for firms when taking a decision concerning the legal system in which they can locate their production. Indeed, and with the probable exception of few economic sectors, there is little evidence that firms decide to move their production in countries where lower environmental standards prevail, and hence lower costs must be taken into account to be compliant with stricter environmental standards; for instance, taxation and labour costs have a much more substantial impact for multinational firms in their decision to select one country or another one for the purposes of establishing their centre of main interests, headquarters or production facilities.

II. ECONOMICS V. LAW: A DIFFERENT APPROACH

The above paragraph considered economists' viewpoint: in the legal discourse the analysis is not limited to a mere cost-benefit analysis, but it also considers "values" that – albeit possibly becoming relevant also within an economic discourse – are not limited to firms' competitiveness. These values may be inspired by non (immediate) economic goals and consider also the normative situation as it globally stands.

Hence, a correct legal approach to environmental regulation in open markets would assume, in the first place, that if environmental protection is a mandatory obligation for the survival of the planet, of humans and of (as many as possible) other living species, then this obligation must be complied with by means of environmental legislation, no matter – at least in principle – what its implications for the firms can be. For instance, if a global agreement is reached to ban whale hunting for whatever reason, then the sort of whale hunters as business persons becomes substantially irrelevant.

In the second place, generally environmental legislation at domestic, regional and – not infrequently – universal level exists already; this provides a conclusive evidence that firms do not operate in a legal "vacuum". Therefore, environmental regulation already poses specific costs and constraints that firms take into account (and pay) when doing business. If this is true, the legal analysis can, at best, investigate on the degree and effectiveness of relevant pieces of legislation. However, since all firms are subject to (varying) costs imposed by the need to comply with (locally or internationally set) environmental standards, it can be safely assumed that environmental regulation is rarely able

⁵ See e.g. and for further references, F. Iraldo, F. Testa, M. Melis, M. Frey, *A Literature Review on the Links Between Environmental Regulation and Competitiveness*, cit.; D.M. Konisky, *Regulatory Competition and Environmental Enforcement: Is There a Race to the Bottom?*, cit.

⁶ See K. Holzinger, T. Sommerer, *'Race to the Bottom' or 'Race to Brussels'? Environmental Competition in Europe*, in *Journal of Common Market Studies*, 2011, p. 315 *et seq.*, also for further references.

to make production shift from one State to another one because of its potential impact on the overall competitiveness of a firm. There may be emblematic exceptions, such as the ship dismantling industry, but normally the differences between environmental standards are not perceived as a clear obstacle to competition in open markets.

This said, one must be aware that the above conclusion works as a rule of thumb; therefore, some further insights seem opportune in order to assess whether a fine-tuning can lead to more conclusive reflections; in so doing, the EU legal perspective appears to be particularly interesting.

III. THE *EVOLUTION* OF EU ENVIRONMENTAL LAW: FROM A NEO-CLASSICAL VISION TO THE PRECAUTIONARY PRINCIPLE

Originally, the then EEC had no competences in the environmental sphere;⁸ they have been conferred to the European Communities with the Single European Act and have been gradually strengthened with subsequent European treaties. However, even before these powers had been formally entrusted to the EEC, some measures were adopted at European level. Their rationale (and legal basis) was that different environmental costs of firms arising out of non-harmonised national environmental standards would affect firms' ability to compete in the common market, with specific regard to the free movement of goods and services.⁹ In other words, a neo-classical approach was clearly underlying these measures, which permitted the adoption of both *a*) political documents and *b*) pieces of legislation.

In the first category, it is worth noting the first Environment Action Programme of 1972, which was adopted in the same year in which the United Nations Conference on Human Environment (UNCHE) took place: such Programme was based on the ideas that prevention is better than cure and that the "polluter pays" principle should be applied. This Programme also recommended Member States to establish a Ministry for the pro-

⁷ H.H. HILLYER, *The Hard Reality of Breaking Up: The Global Transboundary Movement of Ocean Vessel Demolition and Waste*, in *Vermont Journal of Environmental Law*, 2012, p. 755 *et seq.*; J.K. CHOI, D. KELLEY, S. MURPHY, D. THANGAMANI, *Economic and Environmental Perspectives of End-of-life Ship*, in *Resources, Conservation and Recycling*, 2016, p. 82 *et seq.*

⁸ On this issue see N. DE SADELEER, Environmental Governance and the Legal Bases Conundrum, in Yearbook of European Law, 2012, p. 1 et seq.; P. PAGH, The Battle on Environmental Policy Competences. Challenging the Stricter Approach: Stricter Might Lead to Weaker Protection, in R. MACRORY (ed.), Reflections on 30 Years of EU Environmental Law, Groeningen: Europa Law Publishing, 2006, p. 10 et seq.; O. PORCHIA, Tutela dell'ambiente e competenze dell'Unione europea, in Rivista Italiana di Diritto Pubblico Comunitario, 2006, p. 17 et seq.

⁹ On this topic see C. Poncelet, *Free Movement of Goods and Environmental Protection in EU Law: A Troubled Relationship?*, in *International Community Law Review*, 2013, p. 171 *et seq.*; H. Temmink, *From Danish Bottles to Danish Bees: The Dynamics of Free Movement of Goods and Environmental Protection – A Case Law Analysis*, in *Yearbook of European Environmental Law*, 2000, p. 61 *et seq.*

tection of the environment as an institutional tool to start coordinating and governing the respective environmental policies at national level.

Secondly, and as far as pieces of legislations are concerned, reference must be made to the harmonisation instruments adopted pursuant to Art. 100 EEC (now 114 TFEU), concerning national laws having direct influence on the creation or functioning of the common market. 10 When more ambitious goals had to be achieved, such as the adoption of a frame regime on wild birds, or on seals hunting, Art. 235 EEC (now 352 TFEU) was used. 11

Aside of that, however, even prior to any entrusting to the then EEC of environmental competences, the Court of Justice did not miss the occasion to establish that "environmental protection [...] is one of the Communities' essential objectives", 12 thus limiting the freedom to trade waste oils products which could be dangerous for the environment.

When the Single European Act conferred the EEC powers to enact environmental rules, times were however not ripe to have a clear understanding of the footprint that environmental rules would have determined on the Communities' legal system. Thus, Art. 130r.4 EEC conferred powers to the EC as long as "the objectives [concerning environmental protection] can be attained better at Community level than at the level of the individual Member States. Without prejudice to certain measures of a Community nature, the Member States shall finance and implement the other measures". On a side note, this was the first occasion in which the EU treaties explicitly set out (a criterion

¹⁰ See e.g. the Council Directive 79/923/EEC of 30 October 1979 on the quality required of shellfish waters, no longer in force and now replaced by Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy; the Council Directive 84/360/EEC of 28 June 1984 on the combating of air pollution from industrial plants, whose regime is now provided for by Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control); and especially the first waste framework directive (Council Directive 75/442/EEC of 15 July 1975), now replaced by Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. See N. DE SADELEER, *Environnement et marché intérieur*, Bruxelles: Editions de l'Université de Bruxelles, 2010; A.R. ZIEGLER, *Trade and Environmental Law in the European Community*, Oxford: Clarendon Press, 1996.

¹¹ See the Council Directive 79/409 on the conservation of wild birds, now repealed by the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009, and the Council Directive 83/129/EEC of 28 March 1983 concerning the importation into Member States of skins of certain seal pups and products derived therefrom.

¹² See Court of Justice, judgment of 7 February 1985, case 240/83, *Procureur de la République v. Association de défense des brûleurs d'huiles usagées (ADBHU)*, para. 13.

¹³ On the relation between the Single European Act and the environment see *inter alia* C.D. EHLERMANN, *The Internal Market Following the SEA*, in *Common Market Law Review*, 1987, p. 398 *et seq.*; D. VANDERMEERSCH, *The Single European Act and the Environmental Policy of the European Economic Community*, in *European Law Review*, 1987, p. 407 *et seq.*; L. KRAMER, *The Single European Act and Environmental Protection: Reflections on Several New Provisions in Community Law*, in *Common Market Law Review*, 1987, p. 659 *et seq.*

that later on would become) subsidiarity as a tool to allocate powers between the EC/EU and the Member States. 14

As said, the idea of leaving room to Member States in order to allow them to legislate on environmental purposes was probably due to the limited experience gained by legal scholars and policymakers on the then fairly new subject-matter concerning environmental protection. And yet, one cannot deny that, in those years, it was still debated whether the enactment of EU "selected" legislation to protect the environment would have implied distortions of trade or even breach of competition rules. In this sense, as we shall better see below, the *Bettati* judgment is a very clear example of the fears existing in the early EEC years, i.e. that different environmental standards at European level would affect trade among States.¹⁵

This said, Art. 130r EEC already envisaged, *inter alia*, the full catalogue of the backbone principles provided for by transnational environmental law, such as the precautionary principle, the principle of preventive action, the principle mandating that environmental damage should as a priority be rectified at source, and finally the polluter pays principle.

This after having anyway clarified that the EC environmental "should take into account the diversity of situations in the various regions of the Community". The meaning of this sentence can be manifold, but for sure it allows (or more precisely, it allowed) room for regulatory competition at Member States' level, as we shall see in a while.

IV. THE INTENSITY OF EU ENVIRONMENTAL PROTECTION AND ITS CAPABILITY TO AFFECT EU FIRMS' ABILITY TO COMPETE

The above criteria are still in place. They are completed by another principle which is relevant for our purposes, i.e. the one establishing that EU law and policy must "aim at a high level of protection" of the environment.¹⁶

As a matter of fact, this principle has always remained literally unchanged since the Single European Act; however, it has progressively shifted towards a more rigorous interpretation: in the first years of implementation of the EU environmental policy, the Court of Justice endorsed the view that the EU legislator complied with the above legislative criterion when the EU measure was at least as protective as the existing international standards.

Quite probably, the rationale behind this approach was still linked to the room that apparently Member States had in shaping more ambitious environmental goals than those enacted at European level, this permitting regulatory competition. Again, such a

¹⁴ On the relation between the principle of subsidiarity and the environment see *inter alia* J. VAN ZEBEN, *Subsidiarity in European Environmental Law: A Competence Allocation Approach*, in *Harvard Environmental Law Review*, 2014, p. 415 *et seq.*; L. BRINKHORST, *Subsidiarity and European Community Environmental Policy. A Pandora's Box*, in *European Law Review*, 1991, p. 20 *et seq.*

¹⁵ Court of Justice, judgment of 14 July 1998, case C-341/95 *Bettati v. Safety High-Tech*.

¹⁶ This principle is still in force, and is now codified by Arts 3, para. 3, TEU and 191, para. 2, TFEU.

conclusion seems confirmed by the *Bettati* judgment, where the Court excluded that the high level of protection mentioned in Art. 130r EEC would not necessarily require to be the highest that is technically possible, this being a choice left to the Member States, which were entitled – if they so wished – to maintain or introduce more stringent protective measures than those adopted at EC level.¹⁷

After many years of EU environmental legislation, ¹⁸ we may however wonder whether this has ever been the case.

Indeed, the *Bettati* judgment leaves room to believe that, in those years, the provision now embodied in Art. 191, para. 2, TFEU (i.e. the "Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union")¹⁹ was never intended to permit regulatory competition among Member States on domestic environmental policies; rather, more probably this provision would have allowed a race to the top, thus allowing States to implement more courageous environmental policies than those politically available at Community level.

However, as a matter of fact, the original concern – if ever existed – that EU environmental law would leave room for Member States to enhance their domestic environmental standards, or maintain lower standards for whatever purposes, did not materialise. As effectively pointed out, the transfer of environmental competences from States to the Union determined a vast implementation of an EU environmental policy, aiming at harmonising standards among Member States. Hence, neither a race to the top nor a race to the bottom occurred; rather the outcome was a ... race to Brussels, where all stakeholders urged the EU to adopt uniform environmental rules valid throughout all Member States.²⁰

It is hard to understand whether this consequence derived also from the existence of specific remedies available under EU law, such as the infringement procedure now established by Art. 258 TFEU: this provision offers, in fact, the most powerful tool to grant a "vertical governance" concerning transnational environmental law at EU level,

¹⁷ See *Bettati*, cit., para. 47. See J.H. JANS, *Gold Plating of European Environmental Measures?*, in *Journal for European Environmental and Planning Law*, 2009, p. 417 *et seq*.

¹⁸ On EU environmental policy see generally N. Haigh, *EU Environmental Policy. Its Journey to Centre Stage*, London, New York: Routledge, 2016; G. VAN CALSTER, L. REINS, *EU Environmental Law*, Cheltenham: Edward Elgar, 2017; H. Selin, S.D. Vandeveer, *European Union and Environmental Governance*, London and New York: Routledge, 2015; M. Lee, *EU Environmental Law*, *Governance and Decision-Making*, Oxford: Oxford University Press, 2014; O. Porchia, *Le politiche dell'Unione europea in materia ambientale*, in R. Ferrara, M.A. Sandulli (eds), *Trattato di diritto dell'ambiente*, Milano: Giuffré, 2014, p. 153 *et seq.*; A. Jordan, C. Adelle, *Environmental Policy in the EU: Actors, Institutions and Processes*, Abingdon: Routledge, 2013; L. Krämer, *EC Environmental Law*, London: Sweet & Maxwell, 2007; R. Macrory (ed.), *Reflections on 30 Years of EU Environmental Law: A High Level of Protection?*, cit.

¹⁹ Emphasis added.

²⁰ This expression is the same used by K. Holzinger, T. Sommerer, *'Race to the Bottom' or 'Race to Brussels'? Environmental Competition in Europe*, cit., for which I am indebted.

which – coupled with the principle of integration of EU environmental policy with all other policies carried out by the Union²¹ – substantially marks the difference between the much higher effectiveness of the transnational environmental policy in Europe than in other region of the world.²² Yet, it cannot be excluded that, because of the risk that differentiated domestic environmental rules (and hence standards) would be challenged and eventually frustrated under EU fundamental freedoms,²³ a true regulatory competition did never occur at EU level.

V. MAIN FEATURES OF EUROPEAN ENVIRONMENTAL POLICY AND THEIR EXTRATERRITORIAL REACH: AN ATTEMPT TO COMBAT REGULATORY COMPETITION AT INTERNATIONAL LEVEL?

Since long, the scope of EU environmental policy virtually encompasses all subject-matters falling within a broad definition of "environment", i.e., as it was clearly pointed out by the Court of Justice in one of first seminal cases in our subject matter, (i) the environment *stricto sensu*, (ii) human health, as well as (iii) the exploitation of natural resources. ²⁴ Moreover, and in the first place, the standard established at primary law level is one of a "high level of protection" under Art. 191 TFEU; secondly, and as said, a fundamental principle is also established both by Art. 37 of in the Charter of Fundamental Rights of the European Union (Charter) and by Art. 11 TFEU, obliging the EU environmental policy to be "integrated into the policies of the Union and ensured in accordance with the principle of sustainable development". And finally, the EU environmental policy is seen as a proactive one: it is not limited to achieve environmental *conservation* but also to "promot[e] measures at international level to deal with regional or worldwide environmental problems [...] in particular with a view to promoting sustainable development". ²⁵

²¹ See Art. 11 TFEU. See for example J. Nowag, *Environmental Integration in Competition and Free-Movement Laws*, Oxford: Oxford University Press, 2017.

²² See F. Munari, L. Schiano di Pepe, *Tutela transnazionale dell'ambiente*, cit., p. 69 et seq.

²³ See e.g. Court of Justice, judgment of 20 September 1988, case C-302/86 *Commission of the European Communities v. Kingdom of Denmark (the "Danish bottles").*

²⁴ These conclusions seem undisputed since Court of Justice, judgment of 5 May 1998, case C-157/96, *The Queen v. Ministry of Agriculture, Fisheries and Food, Commissioners of Customs & Excise, ex parte National Farmers' Union, David Burnett and Sons Ltd, R. S. and E. Wright Ltd, Anglo Beef Processors Ltd, United Kingdom Genetics, Wyjac Calves Ltd, International Traders Ferry Ltd, MFP International Ltd, Interstate Truck Rental Ltd and Vian Exports Ltd (Mad Cow)*, para. 64 and judgment of 8 July 2010, case C-343/09, *Afton Chemical Ltd v. Secretary of State for Transport*, para. 32. See also General Court, judgment of 11 July 2007, case T-229/04, *Kingdom of Sweden v. Commission of the European Communities* (*Paraquat*).

²⁵ Reference is made, once again, to Arts 191 and 11 TFEU respectively. On this topic see E. Morgera (ed.), *The External Environmental Policy of the European Union – EU and International Law Perspectives*, Cambridge: Cambridge University Press, 2012; G.M. Duran, E. Morgera, *Environmental Integration in the EU's External Relations: Beyond Multilateral Dimensions*, Oxford and Portland: Bloomsbury, 2012; T. FAJARDO DEL CASTILLO, *Revisiting the External Dimension of the Environmental Policy of the EU: Some Challenges Ahead*, 2010, in *Journal for European Environmental and Planning Law*, 2010, p. 365 *et seq*.

Against these legal benchmarks, it comes as no surprise that no room is left for Member States to deviate from them. This excludes also any regulatory competition between Member States based on the environment. Rather, the development of EU environmental policy has put the Union in the front line as the most advanced legal system worldwide.

This evolution had, however, other consequences. In particular, since international standards have been surpassed by stricter EU ones, the Court of Justice has repeatedly stated that the latter apply even in presence of more relaxed "universal" standards. Reference is made, in particular, to the *Intertanko* judgment, ²⁶ where it was held that Directive 2005/35 on ship-source pollution and on the introduction of penalties²⁷ should by all means be enforced by ships flying the flag of a Member State party to the Marpol 73/78 and of the United Nations Convention on the Law of the Sea (UNCLOS) even if these ships actually complied with relevant rules established at international level already. The same approach was used in the Commune de Mesquer case, 28 which applied the EU waste legislation to oil spills at sea,²⁹ with a view to enhancing the number of persons responsible to remedy and reimburse pollution damages occurring to EU coasts: by considering hydrocarbons and heavy-fuel oil mixed with sea water as waste under relevant EU legislation, also the producer of this waste (i.e. the charterer of the Erika vessel) was held responsible for the pollution, thus adding such entity to the ship-owner and the International Oil Pollution Compensation Fund (IOPCF), i.e. the responsible parties of oil spills at sea under the applicable International Convention on Civil Liability for Oil Pollution Damage.

Even more daring has been the outcome of the *ATAA* judgement, ³⁰ where the Court established that Directive 2008/101 to combat aircraft emissions and commit for a sustainable air transport industry³¹ must be applied also to non-EU air carriers willing to call European airports. Moreover, the Court of Justice established that this conclusion would prevail even against the arguments that this claim by the EU to have its standards applied extraterritorially to all aircraft carriers would be illegitimate under interna-

²⁶ Court of Justice, judgment of 3 June 2008, case C-308/06, *The Queen, ex parte International Association of Independent Tanker Owners (Intertanko) and Others v. Secretary of State for Transport.*

²⁷ Directive 2005/35/EC of the European Parliament and of the Council of 7 September 2005 on ship-source pollution and on the introduction of penalties for infringements.

²⁸ Court of Justice, judgment of 24 June 2008, case C-188/07, *Commune de Mesquer v. Total France SA and Total International Ltd* [GC].

²⁹ In particular, Council Directive 75/442/EEC, now replaced by Directive 2008/98/EC.

³⁰ Court of Justice, judgment of 21 December 2011, case C-366/10, *Air Transport Association of America and Others v. Secretary of State for Energy and Climate Change* [GC].

³¹ Directive 2008/101/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community.

tional customary rules of international law on freedom of the skies as well as under the International Civil Aviation Organization (ICAO) Convention.³²

As said, this approach seems to be strongly rooted into EU law, not only in the Court's case-law,³³ but also at secondary law level. More precisely, as regards EU environmental legislation on transboundary matters that are – or should be – covered by international standards, the rationale which seems now generally established within the Union legal system is to wait until international documents have been adopted setting or trying to set "universal" environmental standards, and then to rapidly enact EU legislation anticipating the entry into force of the former. In so doing, the EU (i) "imports" into its own legislation international standards that are not in force yet (and might never enter into force at in-

³² In the Court's words "As for the fact that the operator of an aircraft in such a situation is required to surrender allowances calculated in the light of the whole of the international flight that its aircraft has performed or is going to perform from or to such an aerodrome, it must be pointed out that, as European Union policy on the environment seeks to ensure a high level of protection in accordance with Article 191(2) TFEU, the European Union legislature may in principle choose to permit a commercial activity, in this instance air transport, to be carried out in the territory of the European Union only on condition that operators comply with the criteria that have been established by the European Union and are designed to fulfil the environmental protection objectives which it has set for itself, in particular where those objectives follow on from an international agreement to which the European Union is a signatory, such as the Framework Convention and the Kyoto Protocol. Furthermore, the fact that, in the context of applying European Union environmental legislation, certain matters contributing to the pollution of the air, sea or land territory of the Member States originate in an event which occurs partly outside that territory is not such as to call into question, in the light of the principles of customary international law capable of being relied upon in the main proceedings, the full applicability of European Union law in that territory (see to this effect, with regard to the application of competition law, Ahlström Osakeyhtiö and Others v Commission, paragraphs 15 to 18, and, with regard to hydrocarbons accidentally spilled beyond a Member State's territorial sea, Case C-188/07 Commune de Mesquer [2008] ECR I-4501, paragraphs 60 to 62). It follows that the European Union had competence, in the light of the principles of customary international law capable of being relied upon in the context of the main proceedings, to adopt Directive 2008/101, in so far as the latter extends the allowance trading scheme laid down by Directive 2003/87 to all flights which arrive at or depart from an aerodrome situated in the territory of a Member State" (paras 128 et seq.). For a critical appraisal of this judgment see A. GATTINI, Between Splendid Isolation and Tentative Imperialism: The EU's Extension of Its Emission Trading Scheme to International Aviation and The ECI's Judgment in the Ata Case, in International and Comparative Law Quarterly, 2012, p. 977 et seq. Even if this judgment has had no practical effects, since the application of taxes for greenhouse gas emissions to non-EU aircrafts were postponed, the political "signalling" made by the EU not to allow entry into the EU air transport markets of aircraft not paying the same bill as that requested to EU carriers was very clear and contributed to an overall reflection on this topic at ICAO level. See L. SCHIANO DI PEPE, European Union Climate Law and Practice at the End of the Kyoto Era: Unilateralism, Extraterritoriality and the Future of Global Climate Change Governance, in R.V. Percival, J. Lin, W. Piermattei (eds), Global Environmental Law at a Crossroads, Cheltenham and Northampton: Edward Elgar, 2014, p. 279 et seq., in particular at pp. 292-294.

³³ For other cases in this sense, see judgment of the Court of Justice, judgment of 14 July 1994, case C-379/92, *Matteo Peralta*, judgment of 23 January 2014, case C-437/11, *Mattia Manzi and Compagnia Naviera Orchestra v. Capitaneria di Porto di Genova.*

ternational level) through the adoption of EU environmental rules, and then (ii) applies its own rules extraterritorially to all "actors" willing to trade within the EU.³⁴

Sometimes this policy is implemented irrespective of the existence of any international consensus – or even treaty – to introduce rules setting new environmental standards in any given area. Probably, the most important example in this area is given by the ambitious REACH regime, ³⁵ introducing at EU level an ambitious environmental discipline applicable to all chemicals produced or imported in the Union, i.e. a regime having extraterritorial effects aimed to be applied in an important market area to all firms that are therefore requested to abide by these new rules (and undergo relevant costs to comply with the EU standards) if they want to produce or sell chemicals in the EU.

As said, I am persuaded that, albeit having an extraterritorial reach, these regulations are fully legitimate under international law and consistent with the so-called "effects doctrine", as recently endorsed by the Court in the *Intel* judgment.³⁶

No doubt that the aim of this proactive track-record by the EU in the implementation of transnational environmental policy through the adoption of EU rules is to promote the enhancement of high environmental standards at large, in the light of the fact that modern environmental protection cannot be limited to the territories and the jurisdictions of single legal systems.

However, clearly but indirectly, this approach introduces also a sort of regulatory competition (aimed at achieving a "race to the top") by the EU which applies to EU and multi-national firms operating in the EU. And the outcome of this approach is that of pushing at least EU firms towards global leadership in fostering "green" technology and production processes, on whose pay-off I shall return below.³⁷

³⁴ Significant examples are provided within the maritime field, for instance Regulation (EU) 1257/2013 of the European Parliament and of the Council of 20 November 2013 on ship recycling and amending Regulation (EC) 1013/2006 and Directive 2009/16/EC, which anticipated the 2009 Hong-Kong Convention on ship recycling prepared at International Maritime Organization (IMO) level, or Regulation (EC) 782/2003 of the European Parliament and of the Council of 14 April 2003 on the prohibition of organotin compounds on ships, anticipating the 2001 International Convention on the Control of Harmful Anti-fouling Systems on Ships (which however entered into force in 2008, see www.imo.org).

³⁵ See Regulation (EC) 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) 793/93 and Commission Regulation (EC) 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

³⁶ Court of Justice, judgment of 22 September 2017, case C-413/14 P, *Intel v. Commission*, para. 40 *et seq.* ³⁷ See *infra*, section VII.

VI. REGULATORY COMPETITION IN ENVIRONMENTAL STANDARDS AND TRADE AGREEMENTS BETWEEN THE EU AND THIRD COUNTRIES

Based on the goal to preserve and improve the quality of the environment at global level, as well as in the field of international relations,³⁸ it is not surprising that the EU has been working to implement worldwide its environmental objectives, thus attempting to induce as many firms as possible to comply with EU environmental rules, even if these firms are not based in the EU, when they are nevertheless willing to trade within the Union.

Indeed, when this approach was challenged against WTO rules, the EU had much fewer chances to implement it, because of legal provisions already existing since long such as those contained in the General Agreement on Tariffs and Trade (GATT) - that had been adopted not only prior to the foundation of the EU, but even prior to the emergence of environmental law as a field of law capable of protecting the environment.³⁹ However, the WTO is no longer the only relevant forum for global business decisions: in the past years, the growing importance of finance and thus of investments (especially foreign direct ones) have induced States and regional organizations to re-assess relevant existing bilateral agreements and update them to new schemes. In addition, the Treaty of Lisbon has transferred to the EU the exclusive competence to stipulate treaties on (foreign direct) investments, thus enhancing also EU capabilities to implement the goals established by Art. 21, para. 2, let. f), TEU when using its newly conferred powers to negotiate modern bilateral agreements covering trade and investments. Moreover, and at least looking at the more recent case-law of the Court of Justice concerning its role and willingness to interpret and monitor compliance of these bilateral agreements with EU law, 40 it is reasonable to believe that the safeguard at bilateral level of the EU principles on the environment will be carefully scrutinized also by the EU judiciary.

The EU paramount interest to avoid any regulatory competition on environmental standards with its trading partners seems witnessed by the guidelines issued by the Commission in 2015. Already in its title, i.e. "Trade to All: Towards a more responsible trade and investment policy", ⁴¹ it makes clear the EU thrust to improve socially respon-

³⁸ See, expressly, Art. 21, para. 2, let. f), TEU.

³⁹ See e.g. WTO DSB, panel report of 18 August 1997, case no. ds48, *Canada v. European Communities - EC Measures Concerning Meat and Meat Products (Hormones)*, www.wto.org. See generally M. Pallemaerts (ed.), *EU and WTO Law: How Tight is the Legal Straitjacket for Environmental Product Regulation?*, Brussels: VUB Press, 2006; A. Notaro, *Judicial Approaches to Trade and Environment. The EC and the WTO*, London: Cambridge University Press, 2003; J. Wiers, *Trade and Environment in the EC and the WTO. A Legal Analysis*, Groeningen: Springer, 2002; J. Scott, *On Kith and Kine: Trade and Environment in the EU and WTO*, in J.H.H. Weiler (ed.), *The EU the WTO and the NAFTA*, Oxford: Oxford University Press, 2000, p. 125 *et seq.*; G. Van Calster, *International & EU Trade Law. The Environmental Challenge*, London: Cameron May, 2000; D. Geradin, *Trade and the Environment. A Comparative Study of EC and US Law*, Cambridge: Cambridge University Press, 1997.

⁴⁰ Court of Justice, judgment of 6 March 2018, case C-284/16, *Slovak Republic v. Achmea BV* [GC].

⁴¹ The document is available at trade.ec.europa.eu.

sible patterns in international trade and investments treaties. In this vein, the Commission is adamant in stating that "open markets do not require us to compromise on core principles, like [...] sustainable development around the world or high quality safety and environmental regulation and public services at home". ⁴² And it clearly advocates that the EU strategy will ensure that the Union trade policy will not merely consider the EU interests but also our values, among which sustainable development, ⁴³ shall be promoted through the EU trade agreements and trade preference programmes.

In other words, while different environmental standards may be irrelevant within the WTO, and therefore regulatory competition on environmental matters can still occur at that level, such an option would seem substantially reduced within trades between the EU and those third countries with whom a series of "new generation" trade agreements have been concluded: reference is made, *inter alia* to the Comprehensive Economic and Trade Agreement with Canada (CETA),⁴⁴ the Free Trade Agreements (FTAs) with Singapore, Vietnam, or South Korea, the Deep and Comprehensive Free Trade Area (DCFTA) with Georgia, Moldova and Ukraine); and negotiations are ongoing with other important trading partners, such as Japan and Indonesia.⁴⁵ In all these treaties clear provisions exist entrusting the contracting parties with the power to modify and upgrade their environmental legislation and excluding that the introduction of new environmental standards be considered as an unilateral alteration of the investment conditions for the respective firms which is inconsistent with the treaty.

⁴² Quoted from the foreword by Ms Malmström, EU Trade Commissioner. See W.T. Douma, *The Promotion of Sustainable Development Through EU Trade Instruments*, in *European Business Law Review*, 2017, p. 197 *et seq.*; B.O. Giupponi, *Squaring the Circle Balancing Sustainable Development and Investment Protection in the EU Investment Policy*, in *European Energy and Environmental Law Review*, 2016, p. 44 *et seq.* See also C. Martini, *Balancing Investors' Rights with Environmental Protection in International Investment Arbitration: An Assessment of Recent Trends in Investment Treaty Drafting*, in *International Lawyer*, 2017, p. 529 *et seq.*; G. Mayeda, *Integrating Environmental Impact Assessments into International Investment Agreements: Global Administrative Law and Transnational Cooperation*, in *Journal of World Investment & Trade*, 2017, p. 131 *et seq.*; T.L. Slater, *Investor-State Arbitration and Domestic Environmental Protection*, in *Washington University Global Studies Law Review*, 2015, p. 131 *et seq.*; K. Nowrot, *How to Include Environmental Protection, Human Rights and Sustainability in International Investment Law*, in *Journal of World Investment & Trade*, 2014, p. 612 *et seq.*; S. Di Benedetto, *International Investment Law and the Environmental*, Cheltenham: Edward Elgar, 2013; J.E. Vinuales, *Foreign Investment and the Environment in International Law*, Cambridge: Cambridge University Press, 2012.

⁴³ It is beyond the scope of this short essay to deal with the legal ineffable nature of the principle of sustainable development within transnational environmental law; I therefore refer to F. Munari, L. Schiano di Pepe, *Tutela transnazionale dell'ambiente*, cit., p. 37 *et seq.*, for a (constructive) criticism of this principle.

⁴⁴ See N. MEYER-OHLENDORF, C. GERSTETTER, I. BACH, *Regulatory Cooperation Under CETA: Implications for Environmental Policies*, in *Ecologic Institute Working Paper*, 2016, p. 1 *et seq.*; A. De Mestral, *When Does the Exception Become the Rule – Conserving Regulatory Space under CETA*, in *Journal of International Economic Law*, 2015, p. 641 *et seq.*

⁴⁵ For an overview of these bilateral treaties see G. ADINOLFI, *Alla ricerca di un equilibrio tra interessi economici e tutela dell'ambiente nella politica commerciale europea*, in *Eurojus.it*, 14 May 2017, rivista.eurojus.it.

Such a result is also achieved by means of a different drafting technique compared to previous bilateral investment treaties: in particular, these agreements not only jointly – and quite correctly – discipline trade and investments; they also introduce prominent environmental principles and values, and corresponding rights and obligations, between the contracting parties.

More precisely, and in the first place, it is worth remembering the reciprocal obligation to promote sustainable development, which is constantly inserted as a specific chapter of the above mentioned agreements or in their preamble.

Secondly, quite interesting for our purposes is also the provision under which each party has the right to implement its environmental policies and to introduce non-discriminatory environmental measures without this being considered in any way an indirect expropriation of foreign investors. Indeed, such treaties contain a tentative prohibition onto the contracting parties to modify (i.e. to lower) existing environmental standards in order to favour investments. To this end, worth recalling is in particular the provision contained in the DCFTAs with Georgia, expressly establishing the need to upgrade to EU environmental standards Georgia's legislation on environmental protection.

In the third place, mutual support is established between trade and environmental policy, thus enabling the EU to foster its paramount principle of integration⁴⁶ not only internally, but also within trade agreements with third countries.

And finally, multilateral environmental agreements are expressly referred to in some of the (preferential trade) agreements between the EU and third countries, and it is clarified that their implementation cannot be considered as a prevention of trade liberalization.

Once again, looking at the abovementioned provisions with the lens of the corresponding case-law developed within the WTO dispute settlement system, we can certainly conclude that substantial steps ahead have been done compared to the narrow interpretation of Art. XX, let. b) and g), GATT. Too often this proviso has been applied without any reference to the existing international environmental standards that instead should have been guided a much more sympathetic approach for trade-related environmental measures adopted by WTO contracting parties.⁴⁷

Hopefully the approach of the bilateral free trade agreements will enhance the EU role in dictating environmental standards capable to diminish any potential for regulatory competition based on more relaxed environmental standards also in trade with third countries.

⁴⁶ See footnote 21 and referring text.

⁴⁷ See WTO DSB, panel report of 3 September 1991, case no. ds21, *United States - Restrictions on imports of Tuna*, panel report of 16 June 1994, case no. ds29, *United States - Restrictions On Imports Of Tuna*, WTO Appellate Body report of 29 April 1996, case no. ds2, *US Standards for Reformulated and Conventional Gasoline*, all available at www.wto.org.

VII. POTENTIAL PERSPECTIVES OF THE EU ACTION: AN IMPLIED ATTEMPT TO ENGAGE IN A "RACE TO THE TOP"

As already said, even if the EU enjoys a shared competence in environmental law, its activity over the decades to implement a fully-fledged environmental policy at EU level has made pointless the possibility for Member States to engage in any regulatory competition as far as environmental standards are concerned.

Indeed, in the previous paragraphs we have noted that the EU – as probably the world area enjoying the highest environmental standards or at least aiming to pursue the most ambitious environmental goals – is in fact trying to have its standards applied or respected even outside its jurisdiction. This is done (i) both unilaterally, by means of an extraterritorial application of EU rules, especially when coincident with international standards not yet in force, ⁴⁸ and (ii) at treaty level, since the new trade agreements concluded by the EU expressly advocate the need to foster sustainable trade.

It is not always clear whether these choices are taken by considering also the need to avoid environmental regulatory competition among firms operating in the liberalised marketplace that may be caused by different rules and standards applied outside the EU. However, this means that firms have to constantly adapt to continuously growing standards: consider, for instance, the automotive industry and the substantial investments in research and development that vehicle manufacturers need to undergo to comply with stricter and stricter emission levels in the atmosphere.

On the other hand, it seems undeniable that there is a clear policy driver in the stance adopted by the EU. In the 2017 "State of the Union Address", President Juncker pointed out that "trade is about exporting our standards, be they social or environmental standards, data protection or food safety requirements"; furthermore, he also added that "I want Europe to be the leader when it comes to the fight against climate change. [...] Set against the collapse of ambition in the United States, Europe must ensure we make our planet great again. It is the shared heritage of all of humanity".⁴⁹

Of course, political wishes neither necessarily nor immediately become hard law. However, little doubt exists that the EU is taking seriously the opportunity to bring its firms to the forefront of technological innovation in order to prospectively enjoy a competitive advantage *vis-à-vis* their peers located in other countries, in preparation of the green economy revolution which hopefully will mark the world trade future, consistently with the goals set out during the Rio+20 summit in 2012.⁵⁰

There is, in other words, a potential for regulatory competition as far as environmental standards are concerned, which the EU apparently is trying to implement, and

⁴⁸ See footnote 34 and referring text.

⁴⁹ See europa.eu.

⁵⁰ See UN Commission on Sustainable Development, *The Future We Want: Zero Draft of the Outcome Document*, New York, 2012, in www.uncsd2012.org.

this seems particularly true concerning EU climate strategies and targets under the 2015 Paris Agreement. Reference is made, for instance, (i) to the 2020 Climate and Energy Package, which sets a reduction in the emission of 23 per cent compared to 2016 targets; ⁵¹ (ii) to the 2030 Energy Strategy, targeting a 40 per cent cut in greenhouse gas emissions compared to 1990 levels, at least a 27 per cent share of renewable energy consumption, and at least 27 per cent energy savings compared with the business-as-usual scenario; ⁵² (iii) to the 2050 Low-Carbon Roadmap, suggesting that the EU should cut greenhouse gas emissions to 80 per cent below 1990 levels. ⁵³

No doubt that this series of packages and goals show that EU institutions and decision-makers do not care at all about the risk that enhancing EU environmental standards may jeopardise the competitiveness of EU firms in the world trade. In fact, as said already, the opposite seems true: the implicit rationale of all these measures might even be that EU firms will eventually benefit of the very ambitious standards (and corresponding rules) adopted at EU level, because this will induce or force them to become world leaders in producing goods and services comparatively bearing the smallest environmental footprint.

VIII. CONCLUDING REMARKS

After some decades, principles are now rooted in the legal discourse – be it domestic, regional, or global – mandating environmental protection (and possibly its improvement) as a backbone principle for regulating whatever human activity. The implementation of this principle may not be overreaching yet, may not be immediate, and may not be easy, especially as regards global challenges such as climate change.

And yet, no doubt exists that rules must be introduced to modify the existing behavioural patterns by firms and individuals/consumers, in order to protect and promote the environment. And even if among economists the Keynesian quotation "in the long run, we are all dead" has still appeal, this is not a good reason to kill our planet with regulatory competition playing with environmental standards.⁵⁴ Luckily enough, legal scholars and policymakers in the EU have clearly taken an opposite direction, pushing for a global en-

⁵¹ See ec.europa.eu.

⁵² See ec.europa.eu.

⁵³ See ec.europa.eu.

⁵⁴ In this vein, it has been for example decided that the responsibility of sponsoring States *ex* Art. 139, para. 1, of the UNCLOS Convention to ensure that sponsored entities carry out their activities in deep seabed areas beyond national jurisdiction in conformity with Part XI of the UNCLOS Convention applies "equally to all sponsoring states, whether developing or developed" in order to avoid the spread of "sponsoring states of convenience", which "would jeopardize uniform application of the highest standards of protection of the marine environment, the safe development of activities in the Area and protection of the common heritage of mankind" i.e. in order to prevent regulatory competition (see the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea, advisory opinion of 1 February 2011 on Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, paras 158-159).

hancement of environmental standards also as a tool to promote "greener" and more efficient firms. In other words, and to come back to the opening statements of this *Article*, environmental standards do affect firms' competitive ability, but in my view if a sound, coherent and "globally directed" policy is construed to implement these standards, eventually the influence for the interested firms will be beneficial, and not detrimental.