

Environmental crime and corporate miscompliance: case study on the ILVA steel plant in Italy

Work package 4 "Case studies"



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Abstract

The case of the ILVA steel plant in Italy demonstrates the environmental, health and economic impacts associated with environmental infringements committed by industrial companies. The complexity of the situation, the different issues at stake and the large set of actors involved make the ILVA case a particularly interesting scenario for the research on environmental crime.

Since 1997 the ILVA steel plant in Taranto has been considered as "area at high risk of environmental crisis"; in the following years, the emergency situation in the territory of Taranto has become more and more evident, with serious consequences for health and environment. Surveys commissioned by the Court of Taranto as well as studies carried out by public bodies and NGOs have shown heavy pollution of air, soil, surface and ground waters in the neighboring areas of the steel plant.

Also employment issues have played a relevant role in the ILVA case; indeed, the ILVA steel plant employs thousands of people in Italy and the consequences of a potential closure or liquidation of ILVA would be dramatic. Moreover, the reduction of the steel production would also have significant effects on the whole Italian industrial system.

The critical situation in the city of Taranto resulted in a series of complex events which have followed in rapid succession since 2012 at present; among others, it is worth to recall the closure of blast furnaces, ordered by the judicial authority; the adoption by the Government of the so called 'Save ILVA Decree'; the decision of the Constitutional Court No. 85 of 2013; the recent enactment of Law Decree No. 1 of 2015 dealing with the ILVA company and the city of Taranto.

The ILVA case clearly reveals that the fair balance between the right to health and the protection of environment, on the one hand, the right to work and production needs, on the other one, could be very difficult to achieve. In this framework, the State plays an essential role in order to guarantee national strategic capabilities and jobs, as well as the protection of fundamental rights enshrined in the Constitutions and in the Charter of Fundamental Rights of the European Union.

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LIST OF ABBREVIATIONS

BAT Best Available Techniques

CC Criminal Code
Const. Constitution

Const. Court Constituional Court

IEA Integrated Environmental Authorisation

IED Industrial Emissions Directive

IPPC Integrated Pollution Prevention and Control

Leg. Dec. Legislative Decree

OJ Official Journal

Para. Paragraph

1 Introduction

The case of the ILVA steel plant in Italy demonstrates the environmental, health and economic impacts associated with environmental infringements committed by industrial companies.¹ It is a highly topical subject, characterised by a series of complex events which follow in rapid succession and are still under judgment. The complexity of the situation, the economical, environmental and social tradeoffs under discussion and the large set of involved stakeholders make the ILVA case a particularly interesting scenario for the research on environmental crime.²

In order to get a better understanding of the case, it is worth to mention that ILVA is the biggest steel production plant in Italy and represents the main employer in the South of Italy, employing about 12,000 people and accounting for 75% of the economic production in Taranto province.³ ILVA was previously the State-owned company IRI acquired by the Riva family in the early 1990's; the Riva group now consists of 42 plants operating in 8 countries across the world.⁴ Based on 2011 data, the Riva group is the outright leader in Italy, the 3rd largest steel producer in Europe, and the 21st in the world by production volume.⁵

In July 1997, the Italian Council of Ministers declared the ILVA steel plant in Taranto as "area at high risk of environmental crisis". The judiciary opened an investigation, and in 2005 the managers of the steel plant were convicted for the offence of "Dangerous throwing of things", provided for in Article 674 Criminal Code (CC). The managers were found guilty for having spread in the neighboring areas of the steel plant a large

¹ Grazia Maria Vagliasindi, "Enti collettivi e reati ambientali tra responsabilità "penale" e "responsabilità sociale"", in *La costruzione dell'identità europea: sicurezza collettiva, libertà individuali e modelli di regolazione sociale*, ed. Bruno Montanari (Torino: Giappichelli, 2012), 374 f.

² Grazia Maria Vagliasindi, "Effective networking, formal v substantial compliance, conflicting powers: strengths and weaknesses of environmental criminal provisions enforcement networks in Italy", in *Environmental Enforcement Networks. Concepts, Implementation and Effectiveness*, eds. Michael Faure, Peter De Smedt, An Stas (Cheltenham, UK - Northampton, MA, USA: Edward Elgar Publishing, forthcoming 2015), paras. 4 and 5.

³ See Chamber of the Deputes, stenographic transcript of the meeting No. 48 of 8 July 2013, available at http://www.camera.it/leg17/410?idSeduta=0048&tipo=stenografico; Stephan Faris, "Italy's Jobs-and-Pollution Showdown", 13 December 2012, available at http://www.bloomberg.com/bw/articles/2012-12-13/italys-jobs-and-pollution-showdown.

⁴ Flavio Tonelli, Samuel W. Short, Paolo Taticchi, "Case study of ILVA, Italy: The impact of failing to consider sustainability as a driver of business model evolution", in *Proceedings of the 11th Global Conference on Sustainable Manufacturing - Innovative Solutions*, ed. Günther Seliger (Universitätsverlag der TU Berlin, 2013), 25 ff., available at http://www.gcsm.eu/Papers/33/1.2_7.pdf.

⁵ Tonelli, Short, Taticchi, "Case study of ILVA, Italy", 26.

⁶ Resolution of the Council of Ministers of 11 July 1997.

⁷ Supreme Court, 28 September 2005, No. 38936, Riva, *Giustizia penale* II (2006): 545. It is worth mentioning that Article 674 CC states: "Anyone who throws or spills things, in a place of public passage or in a private place but of common or others' use, deemed to offend or deface or harass people or, in cases not permitted by law, causes the emission of gases, vapors or smoke, deemed to cause these effects, shall

quantity of mineral dust from the deposits existing in the area of the plant, and for not having undertaken actions to prevent the spreading.⁸

Since then, the health emergency situation in the territory of Taranto became more and more evident; tests have shown heavy pollution of the air, soil, surface and ground waters both in the ILVA site and in the nearby inhabited areas of the city of Taranto, especially in the Tamburi quarter. In this context, in June 2010 the mayor of Taranto issued an ordinance stating that children should not play in Tamburi public gardens because of the presence of dioxin traces and other pollution particles.

In 2012 the judicial authority ordered the closure of the plant's blast furnaces; this order was issued within an inquiry conducted on the ILVA's Management for the crimes, among others, of "unnamed disaster" (Article 434 CC), food poisoning (Article 439 CC), intentional omission of precautions against accidents at work (Article 437 CC). The seizure concerned the core parts of the ILVA plant as well as the materials considered as a result of the crime, whose availability, according to the judicial authority, could facilitate the continuation of the pollution activities.¹¹

On 3 December 2012 the Government issued the Law Decree No. 207 (the so called 'Save ILVA Decree', then converted into Law No. 231), on "urgent measures to protect public health, the environment and employment levels in the event of a crisis in industrial establishments of strategic national interest", 12 which allows ILVA to continue the production activity and at the same time imposes to upgrade, within 36 months, the plant according to the requirements set out in the review of the Integrated Environmental Authorisation (IEA).

The judge for preliminary investigations at the Court of Taranto¹³ and the Court of Taranto¹⁴ raised questions of constitutionality of Articles 1 and 3 of the 'Save ILVA Decree'; however, the Constitutional Court ruled against both complaints.¹⁵

The ILVA case involves the relationship between judiciary, administrative and legislative powers, in order to establish the authority to be responsible in determining the balance between the protection of health and the environment on the one hand, and the public interest to the continuity of production and to employment on the other one. This balance is extremely difficult to achieve when it concerns an activity

be punished by imprisonment for up to one month or by a fine of up to €206". This general criminal provision is often used in Italy by the judiciary in cases of air pollution.

⁸ Giuseppe Arconzo, "Note critiche sul "decreto legge *ad Ilvam*", tra legislazione provvedimentale, riserva di funzione giurisdizionale e dovere di repressione e prevenzione dei reati", *Diritto Penale Contemporaneo* 1 (2013): 16-17.

⁹ See the press release "European Commission urges Italy to bring a steel plant in Taranto up to environmental standards". European Commission - IP/13/866, 26 September 2013, available at http://europa.eu/rapid/press-release_IP-13-866_en.htm.

¹⁰ Ordinance of the mayor of Taranto of 23 June 2010, available at http://www.comune.taranto.it/.

¹¹ Decree of 25 July 2012 of the judge for preliminary investigations at the Court of Taranto.

¹² Law Decree No. 207 of 3 December 2012, converted with modifications into Law No. 231 of 24 December 2012. *OJ No. 2 of 03 January 2013*.

¹³ Ordinance of 22 January 2013. OJ No. 6 of 2013.

¹⁴ Ordinance of 15 January 2013. OJ No. 6 of 2013.

¹⁵ Const. Court, 9 May 2013, No. 85. *Rivista Italiana di diritto e procedura penale* (2013): 1024-1494.

lawful and socially useful in itself, which could at the same time negatively affect the environment and health. Indeed, all the rights involved in this case are invested with a constitutional status: the right to health (Article 32 Const.) and the environmental protection (on the grounds of Articles 2, 9 and 32 Const.), the right to work (Article 4 Const.) and the private economic activity (Article 41 Const.).

In particular, in the ILVA case social and economic values are strongly opposed.

From a social point of view, it would be appropriate to inquire into the consequences of a potential definitive closure or liquidation of ILVA on the direct/indirect worker population and on the related plants in other parts of Italy. It is worth to recall that the job of 11,500 directly employed workers and another 9,500 workers in satellite activities is at stake, in a region with a 30% official unemployment rate. The choice cannot be between keeping the plant open along with dangerous emission of polluting substances, or closure of the plant and layoff. This dramatic alternative has received great attention in the newspapers and media, which have constantly offered news and updates on the future of the workers and their families.

Under an economic perspective, it is necessary to recall some principles aimed to ensure the 'vitality' of social systems - such as the principle of not to alter the rules of the international and national market and, in particular, the free competition -, considering also the difficulties of survival of companies struggling with increasing costs for the compliance of their plants with new pollution abatement technology.¹⁷ The investments necessary to reach the required standards could lead the plant to close or to relocate the production in other more tolerant countries, with serious consequences on Italian economic growth.

For these reasons, the vast majority of companies prefer to be subject to the eventual sanctions (often monetary sanctions) following to the commission of environmental crimes, rather than adopting systems that could prevent the risks associated with the improper management of environmental issues. The cost of compliance with environmental regulations could often exceed the expected penalty in case of violation. The incentives to commit environmental crimes are therefore mainly financial, together with a perception, on the part of authors, that they are unlikely to be convicted and/or face severe penalties.

2 Literature review

The ILVA case has received considerable attention in the literature from many perspectives.

The implications of the ILVA case on environment and health are highlighted by Meli (2013), who points out that pollution is not only related to steel production, but concerns the whole organisation that goes with it: from the arrival in the port to the road transport of raw materials, including the spreading of toxic

 $^{^{16}}$ "Taranto community refuses false choice "health vs jobs": an example to follow", available at https://peopleandnature.wordpress.com/2012/10/28/taranto-community-refuses-false-choice-health-vs-jobs-an-example-to-follow/.

¹⁷ Angelo Merlin, "CASO ILVA. Inquinamento e salute: alcuni profili di rischio", *Ambiente e sicurezza* 20 (2012): 44.

dust in the sea bottoms and soils concerned; from the collection system of the substances in not covered mineral parks to the emissions of dioxins and benzoapyrene, which cause widespread pollution in the surrounding areas, but also serious effects on health, especially in neighborhoods near to the factory, where ILVA workers and their families live. According to the author, the result is not only the damage to the environment, but also a variety of individual damages, considering respiratory diseases and more severe pathologies caused by ILVA.¹⁸

In the legal perspective, the literature has dealt with the legitimacy of the 'Save ILVA Decree', which has raised several doubts regarding the reasonableness of the balance realised by the legislator between the different constitutional values at stake as well as the compatibility with the principle of separation of powers.¹⁹ As it concerns the latter, the issue was that the Government had affected a judicial measure through a legal measure, which is formally a law but substantially an administrative act concerning a specific case.²⁰

The Constitutional Court, in its judgment No. 85/2013, has declared the full constitutionality of the 'Save ILVA Decree', pointing out that the Decree has maintained a reasonable balance between the fundamental constitutional rights. According to the Court, "all the fundamental rights protected by the Constitution are in a relationship of mutual integration and therefore it is not possible to identify one of them as having the absolute prevalence over the others".²¹

The decision raised several comments in the literature.²² Some scholars, in agreement with the judgment, consider that the identification of the balance between the protection of health and the environment, on the one hand, and the public interest to the continuity of production and employment, on the other - even

¹⁸ Marisa Meli, "Ambiente, salute, lavoro: il caso ILVA", *Nuove leggi civili commentate* (2013): 1017. The author also deals with the legal aspects of the ILVA case, such as the 'Save ILVA Decree' and the related question of constitutionality.

¹⁹ Gaetano Azzariti (interview to), "Decreto ILVA: auspicabile l'intervento della Corte costituzionale", 7 December 2012, available at www.penalecontemporaneo.it; Roberto Bin, "L'ILVA e il soldato Baldini", *Diritto Penale Contemporaneo* 1 (2013): 5-6; Alessandro Morelli, "Il decreto ILVA: un drammatico bilanciamento tra principi costituzionali", *Diritto Penale Contemporaneo* 1 (2013): 7-11; Angioletta Sperti, "Alcune riflessioni sui profili costituzionali del decreto ILVA", *Diritto Penale Contemporaneo* 1 (2013): 12-15; Arconzo, "Note critiche"; Vagliasindi, "Effective networking", paras. 4.1 and 4.2.

²⁰ Carmine Petteruti, "Country Report Italy - Italian Environmental Law Development in 2013", available at http://www.iucnael.org/zh/documents/doc_download/1161-italy.html.

²¹ Constitutional Court, 9 May 2013, No. 85.

²² Valerio Onida, "Un conflitto tra poteri sotto la veste di questione di costituzionalità: amministrazione e giurisdizione per la tutela dell'ambiente", *Rivista italiana di diritto e procedura penale* (2013): 1494 ff.; Domenico Pulitanò, "Giudici tarantini e Corte Costituzionale davanti alla prima legge ILVA", *Rivista italiana di diritto e procedura penale* (2013): 1498 ff.; Roberto Bin, "Giurisdizione o amministrazione, chi deve prevenire i reati ambientali? Nota alla sentenza ILVA", *Rivista italiana di diritto e procedura penale* (2013): 1505 ff.; Valentina Cavanna, "ILVA: criterio di ragionevolezza e bilanciamento dei diritti (nota a Corte Cost. n. 85/2013)", *Ambiente e Sviluppo* (2013): 631; Ugo Salanitro, "Il decreto ILVA tra tutela della salute e salvaguardia dell'occupazione: riflessioni a margine della sentenza della Corte Costituzionale", *Corriere Giuridico* (2013): 1041 ff.

if it is always subject to the control of reasonableness -, belongs to the administration and cannot be left as a last resort to the judiciary. 23

Critical arguments have been expressed by Salanitro (2013), who has affirmed that the Constitutional Court seems to reverse the perspective which has allowed, in the latest years, the ordinary judge to play a prominent role in the protection of fundamental rights, both in civil and in criminal matters, also in the case of contrast with the solutions adopted by the public administration's measures.²⁴

Also the issues related to the protection of the employment at ILVA have been analysed by the literature. In particular, Pascucci (2013) underlines that the work, protected as a fundamental right by Article 4 of the Italian Constitution and Article 15 of the Charter of Fundamental Rights of the European Union, should be considered as a work which complies with the legal provisions, including, first and foremost, those relating to health and safety of workers. In other words, the right to work is a right to safe and healthful working conditions. According to the author, in the ILVA case the threat to the right to employment arises from the irrational industrial policy and urban planning that, for decades, made to prevail the right to the exercise of private economic initiative on the right to health of citizens and workers; ILVA, through its obsolete technology and outdated security safeguards, seems to threaten employment and production. The necessary protection to the right to health of citizens and workers should be achieved by restoring a reasonable balance between the rights at stake, as proposed in the judgment of the Constitutional Court.

This approach is also shared by Rodotà (2013), who, in an interview with Campetti, affirms that two fundamental rights at stake in the ILVA case - such as the right to work and the right to health - are not opposed but rather coessential, as stated by the Constitution. The work, which Article 1 Const. places at the basis of the Italian Republic, has to respect the dignity of workers, and, consequently, their safety, health as well as the environment. If the right to work and to health had been seriously considered, ILVA would not be in the current situation, from the point of view of social and environmental issues. Today the damages produced require high costs, higher than if the Constitution had been respected. It would be necessary to reintegrate the set of fundamental rights.²⁶

Under an economic perspective, the risk for the Italian industrial system arising from the ILVA case has been analysed by Ranieri (2013), who points out that most of the outputs of the Taranto plant was, and still is, shipped to Northern Italy for reprocessing in other ILVA plants. The author highlights that the potential closure of the Taranto plant would have had serious consequences on the local economy as well as on the Italian industry as a whole.²⁷

²³ Onida, "Un conflitto tra poteri", 1497.

²⁴ Salanitro, "Il decreto ILVA", 1048.

²⁵ Paolo Pascucci, "La salvaguardia dell'occupazione nel decreto "salva Ilva": diritto alla salute vs. diritto al lavoro?", *Diritti, Lavori, Mercati* (2013): 673 ff.

²⁶ Loris Campetti, "Il caso Ilva valutato da Stefano Rodotà", *Inchiesta* (2013): 4.

²⁷ Ruggero Ranieri, "La vicenda di ILVA e i rischi per il sistema industriale italiano", *Economia e politica industriale* (2013): 117 ff.

In addition to the considerable attention and in-depth analyses in the literature, the ILVA case has been widely reported in international and national media, triggering a great political and social debate on the interests of steelworkers, ILVA management, town's population, national public institutions and Europe.

3 Methodology

The methodological approach followed by the authors in the ILVA case study was firstly focused on a qualitative analyses aimed to identify the key issues involved in the case study. An inter-disciplinary approach has been used, involving the legislative framework, the players in conflict, the stakeholders involvement, the different impacts on environment and people and the possible alternative solutions.

Adopting such a perspective, not only the topics relating to environmental law have been studied, but also those dealing with health, economic and social issues; in particular, the analysis focused on a fair balance between environmental protection, health protection and work safety protection. Such a profile has been inquired through the study of the different judicial decisions involved in ILVA case, which has allowed to develop interesting perspectives, offering a useful framework to a better understanding of the social and judicial conflict, and to progress towards more shared solutions.

The authors have collected normative material and case law, national and international scientific literature concerning the topics involved in the research and studied such collected material through a critical approach, according to the criteria and methods specified in the case studies guidelines.

A particular attention has been devoted to the media, which have broadly debated the topic for different reasons, such as the high number of people involved, the dimension of the ILVA steelwork, the links with Italian and European economy, the notoriety of the Riva family who performed a relevant economic role in Italy.

The case study report is drawn from a wide range of published literature, including:

- peer-reviewed papers published in criminal and civil law, ecology and other legal journals;
- research reports, study and policy statements;
- proceedings from conferences and summary documents;
- special reports from NGOs and independent think tanks;
- papers from different international bodies;
- media bulletins and press releases.

4 Case presentation

4.1 Case study area

The ILVA steel work is located in Taranto, Puglia, in the south-east of Italy. The region of Puglia has a surface area of 19,363 square kilometers and is the seventh largest region of Italy. It is surrounded by the Adriatic Sea in the northeast and by the Ionian Sea in the south and has a 800 kilometers long coast. With a population of about 4 million residents, the region's demographic density is higher than the national average. The territory is primarily composed of flat lands and hills; Puglia is the least mountainous region of Italy (2%).

Taranto is the centre of several high environmental impact industrial settlements: the ILVA, ENI refinery (with its storage of national strategic reserves), two power plants formerly owned by Edison and now property of ILVA, the Enipower plant, the Cementir (900,000t annual production of concrete), two incinerators, one industrial dump (Italcave), the dumps of ILVA, one of the biggest and most important naval military base of the Mediterranean (including the military arsenal), and several small and medium sized companies.²⁸

The ILVA factory, more than twice the size of the city of Taranto, has been built next to the Tamburi neighborhood, few kilometers from the city centre. The plant - that was previously property of the State (with the name of Italsider) and later became privatized (bought by ILVA) - over the time has employed most of the citizens of Taranto, which has become one of the most important industrial cities in the Southern part of Italy and one of the main ports for the whole steel market in Europe. The steel plant employs about 12,000 workers and at least another 8,000 contractors in a region where youth joblessness runs near $50\%^{29}$.

²⁸ Alessandro Boldo and Raffaella Freschi, "Re-Scaling the Socio-Ecological Italian Conflicts: Marginality as Arena of Practices". Paper for the ISEG Conference, Lisboa, School of economics and management, 9th - 10th May 2014, 4.

²⁹ Alberto Sisto, "Italy to oversee running of steelmaker ILVA", 4 June 2013, available at http://uk.reuters.com/article/2013/06/04/uk-italy-ilva-idUKBRE9530AN20130604.



4.2 Main institutions and governance level

At national level, the main institutions involved in the ILVA case were the judiciary power and the Italian government.

On 25th July 2012 the judge for preliminary investigations at the Court of Taranto ordered the seizure and shutdown of the hot working areas of ILVA, following the results of the epidemiological survey showing that ILVA fumes were seriously harming the environment and the health of workers and local residents.

The government called for a solution aimed at reconcile environmental and health issues with employment since thousands of jobs were under threat. In this framework, the Italian government issued a Law Decree which allowed ILVA to resume its steel production (Law Decree No. 207 of 03 December 2012), in spite of magistracy prohibition. In particular, Article 1 provides that, in the plants which are recognised as of national strategic interest by the President of the Council of Ministers and occupy at least two hundred employees, the performance of the business, where it is essential to safeguard jobs and production, can continue for a period not exceeding 36 months, even if it was ordered the seizure of facilities, in keeping upgrading the plant with the requirements set out in the review of Integrated Environmental Authorisation (IEA),³⁰ in order to ensure the most adequate protection of the environment and health according to the best available techniques.

³⁰ Since 2004 in Italy the Integrated Environmental Authorization (IEA) is operating: it is the measure issued by the in-charge authorities which authorises the operation of facilities under certain conditions, which must ensure compliance with the requirements of Part II of the Legislative Decree No. 152 of 3 April 2006, as amended by the Leg. Dec. No. 46 of 4 March 2014, implementing the Directive 2010/75/EU on

industrial emissions (Integrated Pollution Prevention and Control).

The reasons for this deliberation were all of economic and political nature: it was a question of defending a "national strategic asset", preserving the national worldwide reputation and the national economic stability.³¹ The Law Decree No. 207 of 2012 also appointed the Guarantor for the Integrated Environmental Authorisation for the ILVA of Taranto (*Garante dell'autorizzazione integrata ambientale per l'ILVA di Taranto*); the task of the Guarantor was to monitor the implementation of the provisions of law, promoting, also, in agreement with the local authorities, efforts for information and consultation, aimed at ensuring, in the environmental matter, the maximum transparency for citizens, in accordance with of the Aarhus Convention of 25 June 1998 (ratified by the Law No. 108 of 16 March 2001).³² Article 2-quater of the Law No. 231 of 24 December 2012, introduced by Law No. 89 of 3 August 2013, has suppressed the figure of the Guarantor and transferred its tasks to the Special Commissioner of ILVA, in charge of designing an "industrial plan" to comply with the IEA provisions. It is worth to mention that, recently, the Law Decree No. 1 of 5 January 2015, has put ILVA under special administration; three extraordinary commissioners have been appointed on 21 January 2015.³³

The conflict between judiciary and administrative power in the balance between economic interests and environmental protection has led to a conflict of constitutional powers. The Court, in its judgment No. 85/2013, has declared the full constitutionality of the 'Save ILVA Decree', operating an examination of reasonable balance between the different constitutional values at stake. In particular, the Court has affirmed that the *ratio* of the 'Save ILVA Decree' is the realization of a reasonable balance between the fundamental rights which are protected by the Constitution, in particular the right to health (Article 32 Const.), the right to healthy environment at work (Article 4 Const.), the constitutionally relevant interest to maintaining employment levels and the duty of public institutions to ensure it. According to the Court, all these fundamental rights are in a relationship of mutual integration and therefore it is not possible to identify one of them which has the absolute prevalence over the others.³⁴

Also at the European level there was interest in the ILVA case. Indeed, in its resolution of 13 December 2012, the European Parliament called on the Italian authorities to ensure the environmental rehabilitation of the polluted steel plant site as a matter of extreme urgency, while at the same time ensuring that the

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[&]quot;Monti acts in bid to save Taranto plant", 30 November, 2012, available at http://www.ft.com/intl/cms/s/0/7a8871d4-3b10-11e2-b111-00144feabdc0.html#axzz3Gm5q74zp.

³² The Guarantor for the Integrated Environmental Authorization for the ILVA of Taranto - with the collaboration of the Institute for Environmental Protection and Research (ISPRA), with the support of regional and provincial agencies for the protection of the environment - hearing the representatives of workers, had to report to the President of the Council of Ministers and to the Ministers for environment and health, any problems encountered in the implementation of the measures contained in IEA, proposing appropriate measures, including the possible adoption of measures for extraordinary administration, also taking into account Articles 41 and 43 of the Constitution.

³³ Law Decree No. 1 of 5 January 2015 on "Urgent measures for the exercise of companies of national strategic interest in crisis and for the development of the city and the area of Taranto". *OJ No. 3 of 5 January 2015*.

³⁴ Onida, "Un conflitto tra poteri", 1494 ff.; Pulitanò, "Giudici tarantini e Corte Costituzionale", 1498 ff.; Bin, "Giurisdizione o amministrazione", 1505 ff.; Cavanna, "ILVA: criterio di ragionevolezza e bilanciamento dei diritti", 631; Salanitro, "Il decreto ILVA tra tutela della salute e salvaguardia dell'occupazione", 1041 ff.

costs incurred in relation to the preventive or remedial action taken are covered in accordance with the polluter pays principle, as required by Article 8 of Directive 2004/35/EC on environmental liability.³⁵

The European Commission has found that Italy is failing to ensure that ILVA operates in conformity with EU legislation on industrial emissions,³⁶ with potentially serious consequences on human health and the environment. The Commission has previously sent Italy two letters of formal notice, in September 2013 and April 2014, urging the Italian authorities to take measures in order to bring the operation of the ILVA plant into compliance with the Industrial Emissions Directive³⁷ and other applicable EU environmental laws.³⁸

4.3 Key stakeholders

ILVA has been at the centre of several disputes. Trade Unions have taken position against ILVA shut down. Indeed, ILVA provides work for thousands of people around Italy and includes, both inside and outside of its perimeter, numerous other small firms; moreover, there are companies working for providing ILVA with raw material lying around the whole Italian territory. Fears of job losses have driven trade unions' action in a region where unemployment stands at 37% in some areas and where only one working-age person out of three has a job.³⁹ The main trade union organisations involved in the ILVA case are: the Italian Federation of Metallworkers (FIM), the Italian Confederation of Workers' Trade Unions (CISL), the Federation of Metallurgical Employees and Workers (FIOM), the General Confederation of Italian Workers (CGIL) and the Italian Metalworkers' Union (UILM).

Several international and national bodies and agencies dealing with public health and prevention are involved in the ILVA case, such as the Regional Agency for the Environmental Protection (ARPA Puglia), the Local Health Department Taranto (ASL), the National Inventory of Emissions and their Sources (INES), the Ministry of Environment, the European Food Safety Authority (EFSA), the National Institute of Health (ISS) and the Food and Drug Administration (FDA).

³⁵ European Parliament resolution of 13 December 2012 on a new sustainable and competitive steel industry, based on a petition received (2012/2905 (RSP)), available at http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+TA+P7-TA-2012-0510+0+DOC+PDF+V0//EN.

³⁶ For more information, see http://ec.europa.eu/environment/industry/stationary/index.htm.

³⁷ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control). *JO L 334/17, 17 December 2010*. This directive has been implemented in Italy by Leg. Dec. No. 46 of 4 March 2014.

³⁸ See the press release "Environment: European Commission urges Italy to address severe pollution issues at Europe's biggest steel plant". European Commission - IP-14-1151, 16 October 2014, available at http://europa.eu/rapid/press-release_IP-14-1151_en.htm.

³⁹ James Mackenzie, "Steel pollution case highlights Italy's slow decline", 29 August 2012, available at http://www.reuters.com/article/2012/08/29/us-italy-pollution-idUSBRE87S07B20120829.

In addition, many environmental non-governmental organisations are interested in Taranto's situation, such as Legambiente, WWF, Peacelink-Altamarea, Cittadinanza Attiva e Contramianto.

4.4 Key impacts

4.4.1 Environmental impacts

The ILVA is one of Europe's biggest responsible in terms of greenhouse gas emissions. In 2011 it was the fourth biggest emitter among the almost 13,000 installations in the EU emissions trading system (ETS), causing 10.1 million tonnes of CO2 equivalent (tCO2e). The free allocation rules of the ETS mean ILVA has not had to buy carbon allowances to cover its emissions. Between 2008 and 2011, the company accumulated an allowance surplus worth 18.4m tCO2e.⁴⁰

According to the Report of the European Agency for the Environment in the year 2011 concerning the pollution from industrial facilities in Europe, the second site on the list of fifteen air polluting activities in Italy is owned by ILVA.⁴¹ The study shows that environmental damage costs in euro is 0.75 billion for ILVA in Taranto; it is worth to mention that the data on environmental damage refer only to air pollutants, without consideration of the underground pollution of soil and aquifers.

In particular, in 2010 ILVA emitted over 4,000t of dust, 11,000t of nitrogen dioxide, 11,300t of sulphur dioxide, 7.0t of hydrochloric acid, 1.3t of benzene, 150kg of Polycyclic Aromatic Hydrocarbons (PAH), 52.5g of benzo(a)pyrene, 14.9g of organic compounds, polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/F) and dioxin PCBdl; levels of PCDD/F and PCBdl may be traced to specific sintering activities (agglomeration area) carried out within the plant.⁴²

4.4.2 Health impacts

According to the SENTIERI Study on the "causes of death, the bio-monitoring and health risk related to air quality" (2011), the results of the analysis in the period 1995-2002 show the presence of an unhealthy environment.⁴³ In particular, the following mortality profile results in Taranto: excess between 10% and

⁴⁰ "Italian prosecutors order seven arrests linked to pollution probe", 27 November 2012, available at http://www.endseurope.com/30101/italian-prosecutors-order-seven-arrests-linked-to-pollution-probe.

⁴¹ Cristina Guerreiro et al., Air Quality in Europe - 2011 Report; European Environment Agency: Copenhagen, Denmark, 2011.

⁴² Tonelli, Short, Taticchi, "Case study of ILVA, Italy", 27.

⁴³ Roberta Pirastu et al., "SENTIERI - Studio epidemiologico nazionale dei territori e degli insediamenti esposti a rischio da inquinamento: risultati / SENTIERI Project - Mortality study of residents in Italian

15% in overall mortality and in all cancers in both genders; excess of about 30% in the mortality of lung cancer, for both genders; excess, in both genders, in deaths for pleural cancer; excess between 50% (men) and 40% (women) in deaths for serious respiratory diseases; excess of about 15% for men and 40% for women in mortality for diseases of the digestive system; increase of about 5% in deaths for circulatory system diseases, especially among men.⁴⁴ The latest update of the "SENTIERI" study of 2014 confirms the sanitary critical situation in Taranto⁴⁵.

The epidemiological survey commissioned by the Taranto Court showed that 386 people living near to the plant died between 1998 and 2010 (around 30 deaths per year) because of exposure to toxic emissions such as dioxins and carbon monoxide. Moreover, the study showed: 237 cases of malignant tumor diagnosed by hospitalization (18 cases per year) due to industrial emissions; 247 coronary events with recourse to hospitalization (19 per year) due to industrial emissions; 937 cases of hospitalization for respiratory diseases (74 per year) (most part among the children) due to industrial emissions.⁴⁶

4.4.3 Impact on agriculture

Recently, a study applied in the rural territory of Statte (a quartier of Taranto), which is placed near to the ILVA still plant, has been carried out.⁴⁷ The aim of the study was the environmental risk assessment for the aquifers and the estimation of pollutants concentration in the forage for evaluating the risk for human health. The obtained results have shown that PCDDs and PCB present in the air move to the agricultural soil and then into groundwater. Furthermore the results have highlighted that the PCDDs and PCB existing in the environmental matrices (air, soil, groundwater) transfer to vegetable tissues of crops and may go into the food chain causing risks for the human health.

Emissions of dioxins, benzoapyrene and other cancer-causing chemicals have poisoned fishing and farmland for miles around, with serious damage to export activities. As a consequence, the cultivation of mussels in the Mar Piccolo Bay of Taranto was banned in 2011 due to pollution by dioxin. For the same

polluted sites: results", *Epidemiol Prev* (2011): 137, available at http://www.epiprev.it/sites/default/files/EP2011Sentieri2_lr_bis.pdf.

⁴⁴ Pirastu et al., "SENTIERI Project - Mortality study of residents in Italian polluted sites: RESULTS", 134.

⁴⁵ Roberta Pirastu et al., "SENTIERI - Studio epidemiologico nazionale dei territori e degli insediamenti esposti a rischio da inquinamento: mortalità, incidenza oncologica e ricoveri ospedalieri / SENTIERI - Epidemiological Study of Residents in National Priority Contaminated Sites: mortality, cancer incidence and hospital discarges", *Epidemiol Prev* (2014): 100 ff., available at http://www.epiprev.it/materiali/2014/EP2/S1/EPv38i2S1_SENTIERIind.pdf.

⁴⁶Annibale Biggeri, Francesco Forastiere e Maria Triassi, "Conclusions of the epidemiologic survey", available at http://www.epiprev.it/materiali/2012/Taranto/Concl-perizia-epidemiol.pdf. See also Mauro Sanna et al., "Conclusions of the chemical survey", 219, available at http://www.epiprev.it/materiali/2012/Taranto/Concl-perizia-chimica.pdf.

⁴⁷ Simone Pascuzzi et al., "Contamination of the environmental matrices in agricultural areas produced by industrial discharges: the case study of the land of the city of Statte (Taranto, Southern Italy)", *Procedia Environmental Sciences* 19 (2013) 671 – 680, available at www.sciencedirect.com.

reason, breeding and free pasture was prohibited in uncultivated areas within a radius of 20 kilometers from the industrial area. 48

In 2008 PeaceLink commissioned a thorough analysis of the cheese made from the milk of sheep and goats grazing around the ILVA plant, which led to the killing of two thousand sheep and goats. The research, paid by the volunteers of the Association, gave a clear verdict: the values were three times higher than what the law states for dioxin and P.A.H.⁴⁹

4.4.4 Economic impact

It is necessary to analyse also the possible economic impacts for the Italian industrial system, related to the eventual closure of ILVA. It is worth to mention that over the last twenty five years, Italy already experienced the crisis of the large factory model, and the inability to manage the dramatic situation of ILVA would certainly exacerbate this process.⁵⁰ The current historical moment requires to defend the industrial perspective of Italy, especially in the field of the steel industry, which is already in a crisis, not only in Italy but even in the whole Europe, because of the actual critical economic situation as well as the growing gap of competitiveness.⁵¹

The considerations above are corroborated taking into account that, according to the data by Confindustria Puglia, the ILVA steel production capacity of approximately 10 million tons per year represents around 40% of the national demand.⁵² If Italy had to be forced to import such a quantity, it would be necessary about €9 billion, which represents one point of the national GDP and 7-8% of the regional GDP of Puglia.⁵³ Moreover, the closure of the plant would have other economic consequences on the production of the steel mills of Novi Ligure and Genoa, which directly depend from Taranto;⁵⁴ indeed, it is worth to note that Taranto is mainly concerned with the first processing of steel, which then is shipped to the other plants which carry out the further processing. The reduction of the steel production would also have significant effects on the production of appliances and especially vehicles, considered that this market has not been experiencing a favorable moment.

⁵⁰ Paolo Bricco, "ILVA and the Fate of a Country Without Big Industry", 21 May 2014, available at http://www.ilsole24ore.com/art/english-version/2014-05-21/ilva-and-the-fate-of-country-without-big-industry-063046.shtml?uuid=AB855tJB.

Alessandro Marescotti, "Taranto, city of dioxin", 5 August 2014, available at http://www.peacelink.it/ecologia/a/40532.html.

⁴⁹ Marescotti, "Taranto, city of dioxin".

⁵¹ Marisa Meli, "Ambiente, salute, lavoro: il caso ILVA", 1019.

Matteo Meneghello, "Corsa in salita per l'acciaio italiano", 28 maggio 2013, available at http://www.ilsole24ore.com/art/notizie/2013-05-28/corsa-salita-lacciaio-italiano-064031.shtml?uuid=AbhvItzH.

⁵³ Giuseppe Cordasco, "Ilva chiude, tutti i numeri di un disastro economico", 27 Novembre 2012, available at http://www.panorama.it/economia/aziende/ilva-taranto-chiusura-numeri/.

⁵⁴ Roberto Landucci, "ILVA, se chiude Taranto, stop anche a Genova e Novi Ligure", 6 agosto 2012, available at http://it.reuters.com/article/topNews/idITMIE87501R20120806.

4.4.5 Impact on tourism

The impact on the tourism sector should also be taken into account. Taranto is a city with a great potential to attract foreign tourists, considering its geographic location, climate, beaches, gastronomy and history; all these characteristics would have placed Taranto among the destinations of the South of Italy with one of the most prosperous touristic activity. However, the news in the international and national press on water pollution, soil contamination and air pollution caused by the ILVA emissions have hampered, together with other reasons, the development of the tourism.⁵⁵

4.5 Key groups of victims

The first group of victims is represented by workers of the ILVA steel plant and their families, who have been seriously affected by this situation.

Then, there are the inhabitants of Tamburi neighborhood. In this regard, the civil court of Taranto recognised in the first instance to 12 families living in Tamburi sums from \leq 11,000 to \leq 15,000 as compensation for dusts coming from the plant, accumulated over the years on the balconies and in the apartments.

Moreover, farmers were put out of business when grazing was banned within 20km (12.4 miles) of ILVA and almost 3,000 livestock with excessive dioxin levels were slaughtered. Mussel cultivation, for which Taranto is renowned, is struggling after beds were moved away from the steelworks.⁵⁷

4.6 Law scope and enforcement

Since 7 January 2014 ILVA is subject to the Industrial Emissions Directive 2010/75/EU (IED),⁵⁸ which has replaced the Directive 2008/1/EC on integrated pollution prevention and control (IPPC)⁵⁹ and was implemented in Italy by the Leg. Dec. No. 46 of 2014.

⁵⁵ See Domenico Palmiotti, "Quelle facce ancora da scoprire della città (non solo) dell'Ilva", 11 November 2014, available at http://www.ilsole24ore.com/art/impresa-e-territori/2014-11-11/quelle-facce-ancora-scoprire-citta-non-solo-ilva-115909.shtml?uuid=.

⁵⁶ "ILVA, giudice riconosce risarcimento inquinamento a 12 famiglie di Taranto", 30 May 2014, available at http://news.yahoo.com/ilva-giudice-riconosce-risarcimento-inquinamento-12-famiglie-taranto-110443787.html.

⁵⁷ "Italian town fighting for its life over polluting ILVA steelworks", 17 August 2012, available at http://www.theguardian.com/world/2012/aug/17/italy-ilva-steelworks-cancer-pollution.

Under the IED, the Commission adopts implementing decisions on best available techniques for each industrial sector. As it concerns the iron and steel production sector, the Commission has adopted the Implementing Decision 2012/135/EU establishing the BAT conclusions, leaving a maximum of four years to installations for full compliance.⁶⁰

The ILVA plant was granted on 4 August 2011 an integrated permit pursuant to the IPPC Directive, and this permit was revised by Ministerial Decree No. 547 of 26 October 2012 in order to ensure compliance with the IED and with the Commission Implementing Decision 2012/135/EU.

As a follow-up to several complaints, the Commission opened an investigation (via EU-Pilot) on 26 March 2012 in order to closely monitor the compliance of the ILVA plant with the above-mentioned legislation.⁶¹

Moreover, the plant has been subject to investigations at national level, which have led to criminal charges and to precautionary measures.

Concerning the criminal charges, before focusing on them, it is worth to note that the ILVA case is, currently, at the stage of the preliminary hearing; therefore, the legal provisions which will be considered refer to the prosecutorial hypotheses (so far mainly confirmed by the court of Taranto when it adopted precautionary measures).⁶²

The core of the charges focuses on the criminal association aimed to commit felonies against public safety – the so-called "environmental disaster", removal or omission of precautions against accidents at work, poisoning of food substances - and felonies against public administration - corruption, bribery, abuse of office and false.⁶³

As to the offences against public safety, Article 434 CC on the so-called "Unnamed disaster" establishes that "Anyone (...) commits an act in order to cause the collapse of a building or of a part of it or another disaster, if the act endangers public safety, shall be punished by imprisonment from one to five years.

If the collapse or the disaster occurs, the penalty shall be the imprisonment from three to twelve years".

The judiciary often uses this provision to cover the most serious cases of damage to environment, i.e. "environmental disaster", like in the ILVA case. According to the Public Prosecutor, the ILVA Management would have caused, through massive emissions of harmful substances in the air (especially dioxins),

⁵⁸ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control). *OJ L 334, 17.12.2010, 17–119*.

⁵⁹ Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control. *OJ L 24, 29.1.2008, 8–29*.

⁶⁰ Commission Implementing Decision 2012/135/EU of 28 February 2012 establishing the best available techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for iron and steel production. *OJ L 70, 8.3.2012, 63–98*.

⁶¹ The information already received and still to be received through the EU-Pilot tool will serve as a basis for considering taking any further enforcement action.

⁶² Carlo Ruga Riva, "Il caso ILVA: profili penali-ambientali", 17 October 2014, para. 1, available at http://lexambiente.it/ambiente-in-genere/188-dottrina188/10999-ambiente-in-genereil-caso-ilva-profili-penali-ambientali.html.

⁶³ Ruga Riva, "Il caso ILVA: profili penali-ambientali", para. 3.

"extremely serious danger to public health" and "events of illness and death in the population living in neighborhoods around the steel plant".⁶⁴

Secondly, the charge also includes Article 437 CC on removal or omission of precautions against accidents at work, which establishes that "Anyone who omits to place installations, equipment or warning aimed to prevent disasters or accidents at work, or removes or damages them, shall be punished with imprisonment from six months to five years.

If the act causes a disaster or an accident, the penalty shall be imprisonment from three to ten years".

In the ILVA case, the Public Prosecutor alleged the deliberate omission of precautions; in particular, he alleged the omission to place installations and equipment able to prevent the discharge of huge quantities of emissions into the atmosphere, emissions which are harmful to the health of workers.⁶⁵

Moreover, the felony of poisoning of water or food substances is also alleged. According to the Article 439 CC, "Anyone who poisons water or food substances, before the draw or distribution for consumption, shall be punished by imprisonment not less than fifteen years.

If the act causes the death of anyone, the life imprisonment shall be applied".

In the ILVA case, the Public Prosecutor alleged two cases of poisoning of food substances: poisoning by dioxin and PCB of 2,271 livestock (sheep and goats) intended for direct and indirect nutrition, killed before consumption, and poisoning of an area of Mar Piccolo, where there were many mussel cultivation plants, contaminated by dioxins, PCBs and heavy metals, which were also destroyed.⁶⁶

Finally, the prosecution concerns the following offences: several misdemeanors against the environment (concerning waste and landfills, air, water and the provisions on the prevention of major accidents); the offences under Article 635 CC on "Damaging" and Article 674 CC on "Dangerous throwing of things"; murder and injury by negligence through violation of safety regulations.

Concerning the precautionary measures adopted in the ILVA case, in addition to those already mentioned,⁶⁷ the judge for preliminary investigations at the Court of Taranto, through a decree confirmed by the Court of Review of Taranto, ordered the precautionary seizure of €8.1 billion in property and goods from the Riva F.i.r.e. S.p.a.⁶⁸ Then, the same judge for preliminary investigations, without a request of the Public Prosecutor, extended the seizure to other societies controlled by ILVA S.pa.

These precautionary measures have been annulled by the Supreme Court of Cassation. In particular, the extent of the seizure was considered as an "abnormal" act, since it was issued without the request of the Public Prosecutor.⁶⁹ Moreover, the Court of Cassation annulled the seizure of €8.1 billion, because it does

⁶⁸ Decree of the judge for preliminary investigations at the Court of Taranto, 22 May 2013.

⁶⁴ Ruga Riva, "Il caso ILVA: profili penali-ambientali", para. 3.1.

⁶⁵ Ruga Riva, "Il caso ILVA: profili penali-ambientali", para. 3.2.

⁶⁶ Ruga Riva, "Il caso ILVA: profili penali-ambientali", para. 3.3.

⁶⁷ See Case Presentation, 2.

⁶⁹ Supreme Court, 20 December 2013, No. 2658, available at www.penalecontemporaneo.it.

not represent the profit of the various offenses alleged.⁷⁰ In particular, the Court affirmed that the profit cannot be identified with the cost savings related to the lack of investments that ILVA had to bear in order to upgrade the plants and make them sustainable; the concept of profit would require a positive income, an effective patrimonial increase.⁷¹

 $^{^{70}\,}Supreme\,Court,\,20\,\,December\,\,2013,\,No.\,\,3635,\,\textit{Rivista}\,\,\,italiana\,\,di\,\,diritto\,\,e\,\,procedura\,\,penale\,\,(2014):\,988\,\,ff.$

⁷¹ Supreme Court, 20 December 2013, No. 3635.

5 Conclusions and policy implications

The analysis carried out in the previous chapters has shown that the ILVA case is of high relevance, in a national, European and also international perspective, having regard to the different (and often opposed) interests to be balanced, the several impacts dealt with, and the large set of actors involved.⁷²

Still under judgment, the ILVA case seems to be, first and foremost, a process to a certain way of producing.⁷³ According to the Prosecutor, ILVA Management would have systematically and with intent organised the production activities in order to maximize the profit to the detriment of the environment, health and safety of workers and citizens.⁷⁴

Secondly, the ILVA case also calls into question the boundaries and responsibilities of the judiciary and of the legislative power, as well as the relationship between the precautionary measures ordered by the judicial authority and the measures adopted by the executive power.⁷⁵

Further concerns could arise from the Law Decree No. 1 of 5 January 2015, dealing with the ILVA company and the city of Taranto.⁷⁶ The Decree states that the company, after 19 years of private management entrusted to the Riva group, shall be put under special administration. Indeed, the ILVA plant should be rented out to a new public company, government-controlled, for three years; after this period the company should be able to be placed on the market again.⁷⁷ On 21 January 2015 the Ministry for economic development appointed three extraordinary commissioners for the ILVA steel plant in Taranto.

The ILVA case reveals to what extent the effects of (among other crimes) environmental crimes can be relevant, not only on the elements of the environment but also on human health and public safety; ⁷⁸ it at the same time shows that the commission of environmental crimes goes often with significant economic implications, especially occupational impacts. ⁷⁹

⁷² Vagliasindi, "Effective networking", para. 4.2.

⁷³ Ruga Riva, "Il caso ILVA: profili penali-ambientali", para 2.

⁷⁴ Ruga Riva, "Il caso ILVA: profili penali-ambientali", para 2.

⁷⁵ Ruga Riva, "Il caso ILVA: profili penali-ambientali", para 2.

⁷⁶ See "Ilva, Confindustria Taranto lancia l'allarme "indotto"", 15 January 2015, available at http://www.inchiostroverde.it/ilva-confindustria-taranto-lancia-lallarme-indotto/.

⁷⁷ Matteo Meneghello, "Special commissioner Gnudi expects the steel company Ilva to be profitable again in 2017", 16 January 2015, available at http://www.italy24.ilsole24ore.com/art/business-and-economy/2015-01-15/special-commissioner-gnudi-expects--the-steel-company-ilva-to-be-profitable-again-2017--194443.php?uuid=ABbCoeeC.

⁷⁸ Vagliasindi, "Enti collettivi e reati ambientali", 375.

⁷⁹ Vagliasindi, "Enti collettivi e reati ambientali", 375.

The complexity of the issues at stake would require an improvement of *ex ante* monitoring activity by the administrative authorities, in the perspective of prevention of environmental crimes; indeed, practitioners (prosecutor⁸⁰) point out the ineffectiveness of administrative sanctions against environmental infringements committed by industrial companies.

The ILVA case also shows the inadequacy of an environmental criminal law system based only on misdemeanors against natural persons, whenever the non-compliance with environmental provisions is due to specific business policy choices.⁸¹

Practitioners (prosecutor⁸²) highlight that significant changes could arise in this respect, since Leg. Dec. No. 121 of 7 July 2011 extended to some listed environmental crimes the system of "administrative liability" of legal persons and collective entities for crimes committed in their own interest or to their benefit, as provided by Leg. Dec. No. 231 of 8 June 2001 (although expressly qualified as administrative by the legislator, such liability is considered as having a substantial criminal nature).⁸³ Further improvements of the environmental criminal law system might come from the recent draft bill, approved by the Chamber of Deputies and currently under discussion in the Senate, which aims at introducing four new felonies into a new chapter of the Criminal Code: pollution, environmental disaster, obstruction of controls, illegal transport and abandonment of radioactive materials.⁸⁴

The lesson learned by the ILVA case is that the achievement of a fair balance between the right to health and the protection of environment, on the one hand, the right to work and production needs, on the other one, is the corner stone of environmental and economic sustainability⁸⁵ and long-term survivability of the firms. In this framework, the State plays an essential role in order to guarantee national strategic capabilities and jobs, as well as the protection of fundamental rights enshrined in the Constitutions and in the Charter of Fundamental Rights of the European Union.

⁸⁰ Interview with an Italian Prosecutor, 27 January 2015.

⁸¹ Vagliasindi, "Enti collettivi e reati ambientali", 375 ff.

⁸² Interview with an Italian Prosecutor, 27 January 2015.

⁸³ For more information on the responsibility of corporations and collective entities for environmental crimes in Italy, see Grazia Maria Vagliasindi, "Liability of Legal Persons and Collective Entities for Environmental Crimes in Italian law", *Eucrim* 3 (2012): 131 ff.; Grazia Maria Vagliasindi, *Attività d'impresa e criminalità ambientale. La responsabilità degli enti collettivi* (Catania: Torre, 2012).

⁸⁴ Carlo Ruga Riva, "Commento al testo base sui delitti ambientali adottato dalla Commissione Giustizia della Camera", 22 January 2014, available at www.penalecontemporaneo.it.

⁸⁵ Vagliasindi, "Enti collettivi e reati ambientali", 430 ff.

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