

CARBON CAPTURE LEGAL PROGRAMME

Carbon Capture and Storage in Poland

The Transposition of Directive 2009/31/EC into Polish Law

Jerzy Jendrośka

Managing Partner of Jendrośka Jerzmanski Bar & Partners

Adjunct Professor of European and International Law at
Opole University

March 2014

University College London
Centre for Law and the Environment, Carbon Capture Legal Programme
Copyright © 2014

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior permission of the UCL Carbon Capture Legal Programme.

Forward by Professor Richard Macrory

Carbon Capture and Storage in Poland is the final report in a series of studies commissioned by the UCL Carbon Capture and Legal Programme designed to examine the transposition of the EU Directive on Carbon Capture and Storage in a number of key Member States. Our aim was not to duplicate the more formal article by article transposition studies carried out by the European Commission as part of its enforcement role. Instead we chose authors who were not necessarily experts in CCS law as such at the time of commissioning but were deeply experienced in national environmental law and the ways in which obligations under EU environmental law were introduced into their national system.

Nearly all legal development takes place with a political and policy context. So we asked the authors not just to address some of the more formal key legal questions posed by the Directive for their national law, but also to give some feel for how the subject of CCS was being handled generally within their country. We also asked them to consider the extent to which the transposition of the CCS Directive posed particular challenges not necessarily encountered before in their national systems of environmental law.

EU Environmental Directives usually give Member States considerable discretion as to how they should implement key provisions within their system, and the CCS Directive is no exception. The studies reveal some fascinating and important differences in approach – including the powers and influence of local authorities, and the extent to which transposition is achieved by bespoke legislation or the adaptation and amendment of long-established existing laws, especially those relating to mining.

The Directive expressly gives Member States the discretion not to permit any CCS storage within their territory. Some Member States, sensitive to political concerns over storage, wished to limit transposition for the present to demonstration projects only, leaving decisions for further transposition for commercial projects to a later stage. In the past the Legal Services of the European Commission has normally taken the position that whatever the policy position of a national government, it cannot limit formal transposition of provisions in a directive into national law, in case there is a subsequent policy change. The only exception allowed for was where the activity concerned was physically impossible within a territory. This rather strict position certainly appeared to be the policy of the Commission in the early days of the Directive's transposition, causing considerable difficulties in countries such as Germany where national legislatures simply would not agree to a law allowing for the authorization of a CCS project beyond the demonstration phase. As Jerzy Jendroska illustrates in this Report, at some point fairly recently the Commission appears to have softened their stance, and accepted that given the discretionary provisions in the CCS Directive a Member State will not be in breach of its transposition obligation if it limits legislation to experimental or demonstration CCS projects at this stage. This seems a pragmatic and sensible decision.

For reasons described in the Report, the development of Polish legislation took much longer than originally expected, and I am especially grateful to Jerzy for being prepared to stay within the subject well beyond the original brief and right until the final national law was passed at the end of

last year. As he notes, there is a certain irony in the timing in that some months before the law was finally passed, both the key energy company involved in the first CCS demonstration project in Poland and the Government appeared to have abandoned on any further CCS development, mainly because of the economic uncertainties involved. But politics and economics can change more rapidly than the law. And the fact that Poland now has a robust CCS legal framework in place will stand it in good stead if and when circumstances change.

Professor Richard Macrory

Director, UCL Carbon Capture Legal Programme.

The other commissioned case-studies are available at:
<http://blogs.ucl.ac.uk/law-environment/category/ccs/>

CCLP EU Case Studies UK (2011)

Author: Chiara Armeni

CCLP EU Case Studies Germany (2011)

Author: Ludwig Krämer

CCLP EU Case Studies Spain (2011)

Author: Ludwig Krämer

CCLP EU Case Studies Romania (2011)

Author: Mónika Józson

CCLP EU Case Studies Norway (2011)

Authors: Hans Christian Bugge and André Lamark Ueland

Contents

Forward by Professor Richard Macrory.....	3
The Overall Picture	7
I. Regulatory context – overview of the legal and administrative framework in Poland.....	8
1. Legal system	8
2. General administrative framework	8
3. Environmental legislation.....	10
II Policy context for CCS.....	11
1. Role of CCS within the climate change mitigation strategy	11
2. National roadmap for CCS deployment in Poland.....	12
3. Financial incentives (and disincentives)	18
4. Policy preferences regarding options for storage	19
III. Legal process for the transposition of the CCS Directive	19
1. Applicable procedures and key actors	19
2. Legislative technique chosen.....	20
3. Transposition process.....	20
IV. The Regulatory scheme and administrative framework for CCS in Poland	22
1. Regulatory scheme	22
Permitting.....	22
Operation, closure and transfer of responsibility	25
Charges	25
2. Main administrative bodies involved in the implementation of the Directive	26
The role of regional and local, self-governmental authorities.....	27
VI. Ownership of pore space and conflicting uses of the storage site	30
VII. Liability and transfer of responsibility.....	31
VIII. Financial security and the financial mechanism	32
Financial security	32
Financial mechanism	34
IX. CCS readiness.....	35
X. Public participation and information	36
(i) Public involvement in the transposition process	36
(ii) Public involvement in permitting procedures.....	37
(iii) Information to the public	38
XI. Integration with existing environmental law generally	39
XII. Conclusions.....	41

Carbon Capture and Storage in Poland

The Transposition of Directive 2009/31/EC into Polish Law

Jerzy Jendrośka

The Overall Picture

Poland presents something of a paradox for CCS. An effective legal framework for CCS, transposing the EU CCS Directive, was finally created in September 2013. Unlike some European countries, there has been little in the way of intensive public opposition to CCS. Yet, three months earlier, the main power company, which was involved in developing the only major CCS capture and storage demonstration project, decided to withdraw – lack of proper funding and legal uncertainties were cited as reasons for their decision. At the same time, the Government, which initially showed support for CCS, now appears to have ceased further work on the developing a roadmap for CCS in Poland. Commercial and economic considerations are now the critical factors.

Transposition of the CCS Directive in Poland has been a lengthy process, with the final national legislation agreed in September 2013, over two years after the deadline for transposition. The delay does not seem to be due to obstruction or negligence, but a genuine desire to create a workable and clear legal framework. Rather than create a separate law on CCS, the decision was taken to amend existing legislation on mining activities. This was reasonable but added considerably to the complexities of transposition. There were also challenges in fitting in the requirements of the Directive into the existing legal institutions, given that these institutions were created for slightly different purposes. Nevertheless, most of the legal provisions of the Directive could be fitted into existing frameworks. The exception was the provision concerning the transfer of responsibility following the cessation of CO₂ storage operations – this raised novel legal issues not yet encountered in Polish law. At the same time there was considerable debate as to whether the transposition could legally be limited to demonstration projects, and it was only fairly recently that the European Commission confirmed that this was possible, given the discretion available under the Directive.¹

As opposed to certain other Member States of the European Union (EU), Poland favours onshore, rather than offshore, storage of CO₂. Government policy on CCS has mainly been reflected in energy policy documents. A governmental Roadmap, adopted in November 2009, envisaged various initiatives for CCS, including the development of standards for capture-ready new power plants and seeking EU support for at least two demonstration projects. The proposed measures included a public information campaign on CCS. Up until now there has been little in the public discussion on CCS. During the legislative process, there was some opposition to CCS in Parliament but this was not sufficiently strong to block the legislation. However, in 2013, the

¹ Letter from the European Commission, DG Climate Action, Brussels, 28 February 2013, available at: http://www.mos.gov.pl/g2/big/2013_03/36a4606daa2003104f39ad0ce9af4836.pdf (last visited on 3 March 2014)

main power company PGE Górnictwo i Energetyka Konwencjonalna SA withdrew its involvement in a CCS demonstration project citing commercial and legal uncertainties, and the Government has ceased any further development of its CCS Roadmap.

I. Regulatory context – overview of the legal and administrative framework in Poland

1. Legal system

Poland is a unitary country and has a codified continental legal system. According to Art. 87 of the Constitution, the sources of generally binding Polish law are: the Constitution, statutes (acts adopted by the Parliament - ustawy), and ratified international agreements and executive regulations (issued within a statutory delegation by the Council of Ministers or by the relevant ministers – rozporządzenia). As Poland is a unitary country, all these legal measures are legally binding in the entire territory. Furthermore, Art. 87 of the Constitution envisages so called “local laws” which are adopted by authorised bodies and which are generally binding in the respective territory.

Under Art. 91(1) and 91(2) of the Constitution, ratified international agreements, after their promulgation in the Official Journal of Laws, constitute part of the domestic legal order and shall be applied directly. If an international agreement was ratified upon prior consent granted by statute, it has precedence over Polish statutes if such an agreement cannot be reconciled with the provisions of such statutes.

The Constitution provides for the supremacy of EU law over domestic legislation. Art. 91(3) of the Constitution stipulates that, where laws are established by an international organization (e.g. the EU), and where this is provided for in the agreement establishing that organization, such laws shall be directly applicable in Poland and take precedence over national law in case of a conflict. This is subject to ratification of the agreement by the Republic of Poland. Furthermore, Art. 3 of the Constitution stipulates that Poland is a unitary country, and that the transposition of EU Directives is provided for by legal acts adopted at the central level. Usually, the normative provisions of EU Directives are transposed by statutory provisions, while technical details (usually those in Annexes to Directives) are dealt with by way of executive regulations.

2. General administrative framework

Although Poland is a unitary country, it is quite decentralized and has a four-tier system of public administration, set out as follows:

- 1) Central level;
- 2) Regional - voivodship level (województwo - there are 16 regions);
- 3) Powiat (districts – there are approximately 380 powiats); and
- 4) Gmina (local community – there are approximately 2,500 communes - gminas).

This structure is not hierarchical but it rather consists of independent governmental and self-governmental authorities.

The central level is basically entrusted with issues of national importance, mostly strategic ones (law-drafting, international relations etc.), with only very few competences to take decisions in individual matters. The Environment Minister is traditionally responsible for almost all environmental matters except for land-use planning, most of product control and pollution of the sea. Its portfolio also includes geology and licensing for mining. The Economy Minister has the overall responsibility for the economy, including energy. It has also some regulatory functions, including most environmentally related product control. Under the Environment Ministry sit a number of specialized central agencies dealing with specific issues, including for example the Environmental Protection Inspectorate (responsible for monitoring compliance and enforcement) and the General Directorate for Environmental Protection (responsible for protection of Natura 2000 sites, managing liability for environmental damage and overseeing EIA and SEA procedures). Both agencies have their regional branches in each region (voivodship).

Traditionally in Poland the sectoral ministries such as the Environment Ministry or Economy Ministry are responsible for international relations within their respective spheres of competence. This includes matters related to EU membership, including in particular the transposition of EU Directives. The Foreign Affairs Ministry provides overall control over such activities and gets involved directly in issues of particular importance for international relations. Between 1996 and 2009, this work was carried out by a separate Office of European Integration Committee, which was directly responsible to the Prime Minister. Since 2010, EU affairs are once more included in the portfolio of the Foreign Affairs Minister.

At the regional level there are 16 voivodships. Public administration at this level consists of two separate sets of institutions:

- Self-governmental bodies; and
- Governmental bodies.

Self-governmental bodies at the regional level include the regional parliament (voivodship sejmik), the board of voivodship and the marshal of the voivodship (which is the head of self-governmental administration). The marshal of the voivodship has some regulatory decision-making power for individual matters, e.g. issuing environmental permits in relation to certain development projects or installations. Moreover, self-governmental bodies are entrusted with setting the policy for regional development, including regional land-use planning.

The main governmental body at the regional level is the voivoda, the representative of the central government in any given voivodship. Voivodas have a general competence but very limited powers to carry out a separate “regional” policy. Their main role is to oversee self-governmental bodies and make sure that the law is observed and that the policies of central government are implemented. The voivoda has general competence, but at regional level there are also regional branches of some central agencies, including regional branches of the Environmental Protection Inspectorate (the so-called Voivodship Environmental Protection Inspectorate) and of the Directorate for Environmental Protection (the so-called Regional Environmental Protection Directorate).

The Gmina represents a local community. Gminas have far-reaching competences to set their own development policy. The strongest instrument they have is the development of the local land-use plan, which is a legally binding document. The Gminas also decide the directions of the policy for local development by, inter alia the designation of areas for certain purposes. Local authorities at Gmina level issue also so-called ‘decisions on environmental conditions’ (Environmental Impact Assessment (EIA) decisions). These constitute the first and mandatory part of multi-stage decision making (development consent) for projects subject to the EIA scheme under the EU EIA Directive (Directive 2011/92/EU). In issuing these decisions Gminas must consult the respective Regional Environmental Protection Directorate.

Regional or local (Poviat, Gmina) representatives or authorities (mainly self-governmental) are competent with regard to most administrative decisions in individual matters (e.g. development consents and pollution permits, including IPPC permits). The Environment Minister does not usually issue individual permits except for some permits of significant importance, including proposed CCS permits. The Environment Minister is primarily responsible for preparing the majority of normative acts and national plans, programmes and policies related to the environment.

3. Environmental legislation

Environmental legislation in Poland is rather fragmented – it consists of about 20 statutes (legal acts adopted by the Parliament) dealing exclusively with environmental issues and about 100 executive regulations. The main act for environmental protection is the Environmental Protection Law Act of 2001 (EPLA). When adopted in 2001, EPLA was meant to be the main environmental act (even called sometimes the “environmental code”) with only certain issues (water, nature protection, waste management) left for separate legal acts. Over the years, for practical reasons, certain issues (such as environmental assessment, public participation, access to environmental information, and some aspects of environmental liability) were removed from EPLA and regulated in separate acts. The sectoral legislation (such as that concerning waste management, water, nature conservation, etc.) is divided into a number of statutes regulating certain specific issues (for example, in addition to the Waste Act of 2012 there are nine other statutes regulating various specific aspects of waste management).

EPLA provides for general principles of environmental protection (e.g. the polluter pays principle, the precautionary principle, etc.) and regulates various specific areas. EPLA notably provides the legal framework for permits for emissions into the environment (IPPC permits and sectoral permits for emissions into air or water); fees for the use of the environment; the functioning of environmental funds; and requirements for installations which are subject to the industrial accidents scheme (so-called “Seveso” plants).

Most ‘horizontal’ procedural issues are regulated by way of the Act of 2008 on Access to Environmental Information, Public Participation in Environmental Protection and on Environmental Impact Assessments (EIA Act). As indicated in its title, the Act regulates many cross-cutting issues (including Strategic Environmental Assessment (SEA) and habitat assessment) and sets out the institutional framework for the functioning of one of the environmental authorities

in Poland: Directorates for Environmental Protection. This environmental legislation is complemented with a number of legal acts which, although not directly environmental, remain relevant for environmental issues. These include, inter alia, the Building Law Act of 1995 (BLA), the Act of 2003 on Land Use Planning, and a number of acts regulating resource use, of which the most important in the context of CCS is the Geological and Mining Law Act of 2011.

The Geological and Mining Law Act of 2011 (GMLA 2011) is the major legal act in the field of geology and mining in Poland. It provides that concessions are required for prospecting and extraction activities of fossil minerals, and stipulates that the Minister responsible for the environment, the Voivodship (i.e. Provincial) Marshall, or Starost (the County Head) are the authorities competent to grant such concessions. The concession for extraction of fossil minerals from deposits will only be granted after the relevant geological documentation has been accepted, a proposal for deposit management has been submitted and, where necessary, a Decision on Environmental Conditions for the implementation of the project has been obtained (see Section XXX below).

II Policy context for CCS

1. Role of CCS within the climate change mitigation strategy

In Poland there is no single separate policy document setting a comprehensive climate change strategy. As far as the climate change mitigation strategy is concerned, formally speaking such a strategy was adopted in a document entitled *Climate Policy of Poland : Strategy to reduce greenhouse gas emissions in Poland until 2020*. It was developed by the Environment Ministry and adopted by the Council of Ministers in November 2003. The document has not been amended since 2003 despite the changing circumstances, including such important ones as the adoption of the CCS Directive in 2009. Bearing in mind that at the time of its adoption the issue of CO₂ capture and storage had not yet been widely discussed it is hardly surprising that the document contains only a very vague reference to CCS technology as one of possible activities worth promoting in the future. Generally, it now seems to be largely outdated and does not seem in practice to be influencing the current main issues related to Poland's policy on climate change mitigation.

As far as climate change adaptation policy is concerned it was only in April 2013 when the Environment Ministry announced that it had completed a national plan of adaptation to the impacts of climate change (*Strategiczny Plan Adaptacji dla sektorów i obszarów wrażliwych na zmiany klimatu do 2020 roku SPA 2020*). The Plan was adopted by the Council of Ministers on 29 October 2013. It is focused on adaptation to climate change and does not address CCS technology, nor does it refer to other mitigating measures.

A reference to CCS technology may be found in the *National Environmental Policy for Years 2009-2012* and its 2016 Outlook which was developed by the Environment Ministry in 2008 and adopted by Parliament in May 2009. This document was prepared to fulfil obligations under Title 1, Part. III of EPLA which requires that a National Environmental Policy shall be prepared for 4-

year period, including the following 4-year outlook thereof, and that it should set the objectives and priorities of the national environmental policy as well as the means necessary to achieve the objectives, including legal and economic measures. In its chapter devoted to ‘priorities’ the National Environmental Policy states that the proposed policies “fit well into the European Union priority scale under the 6th Community Environmental Action Programme”.² In this context it underlines the importance of the Climate and Energy Package and mentions the essential role of the outcome of negotiations regarding the draft CCS Directive. However, the operational part of the document does not single out climate change as a separate policy issue nor does it present any overall framework in this respect, let alone address the role for CCS in Polish climate change policy.

Much more attention to CCS technology is being paid in documents on energy policy. The document called *Energy Policy of Poland until 2030* was developed by the Economy Ministry and adopted by the Council of Ministers in November 2009, well after negotiations regarding the CCS Directive were concluded. Thus, as the first of the main energy policy objectives aimed at mitigating the environmental impact of the power industry (point 7.1) this document refers to “reducing CO₂ emission by 2020, while maintaining a high level of energy security”. Furthermore, among measures aimed at mitigating the environmental impact of the power industry (point 7.2) it includes the following measures specifically related to CCS:

- introducing standards for building new power plants under the system of preparation for carbon capture and setting national capacity for geological CO₂ storage, including in depleted crude oil and natural gas deposits at the bottom of the Baltic Sea;
- active participation in implementing the initiative of the European Commission to build large-scale demonstration facilities for CCS technologies;
- applying CCS technologies to support crude oil and natural gas extraction; and
- intensifying research and development of CCS technologies and of new technologies that allow using captured CO₂ as a raw material by other industry branches (sometimes referred to as ‘carbon capture and utilisation’).

Furthermore, the Action plan for the years 2009–2012, which is annexed to the *Energy Policy for Poland until 2030* (see Appendix 3),³ envisages a series of implementing measures which effectively constitute a roadmap for CCS deployment in Poland (see below).

2. National roadmap for CCS deployment in Poland

Since the early 2000s, the issue of CCS has been mentioned in a number of documents but with little in the way of detail. Probably the first more elaborated official document in this respect appeared in 2008 when a document called *Activities of the Ministry of the Environment for recognition of geological structures for underground storage of carbon dioxide* was prepared.⁴ It did not attempt to provide a comprehensive roadmap for CCS, was rather short (only 18 pages),

² English version available at http://www.mos.gov.pl/kategoria/1979_environmental_policy/

³ English version available at <http://www.mg.gov.pl/Bezpieczenstwo+gospodarcze/Energetyka/Polityka+energetyczna>

⁴ *Działania Ministerstwa Środowiska W Celu Rozpoznania Struktur Geologicznych Dla Podziemnego Składowania Dwutlenku Węgla*, Warsaw, June 2008, available at:

http://www.mos.gov.pl/g2/big/2009_08/e83e155d4a74ba448ff66d41002bcebf.pdf (last visited on 4 March 2014)

extremely general and can now be considered as mostly outdated. Nevertheless it set the main policy goals, including identification of geological structures for underground CO₂ storage in the country, support for national CCS demonstration projects and analysing the degree of public acceptance for the geological storage of CO₂.

Between 2009 and 2011 there were several more comprehensive attempts to design a roadmap for CCS deployment in Poland, namely:

- a) a Governmental roadmap;
- b) a Non-governmental roadmap; and
- c) a Power Company (PGE) roadmap.

Governmental roadmap

The most important roadmap for CCS in Poland was the roadmap designed in the official governmental documents related to energy policy. As mentioned above, Appendix 3 to the *Polish Energy Policy until 2030*, headed *Action plan for the years 2009–2012*, envisaged a series of measures related to CCS deployment in Poland.

Following the objectives indicated in point 7.2 of the Energy Policy, the Action Plan envisaged a number of specific measures to implement its Priority VI entitled Mitigating the environmental impact of power industry.

Measure 6.4, entitled “*Using the income from auctions of CO₂ emission allowances to support measures aimed at reducing greenhouse gas emission volumes*”, among priorities for the use of proceeds from CO₂ emission allowance auctions, envisaged support granted for building CCS installations and conducting research in the area.

Measure 6.5, entitled “*Introducing standards for building new power plants under the system of preparation for carbon capture and setting national capacity for geological CO₂ storage*”, envisaged the following actions:

1. Participation in the work carried out by the European Commission on devising standards for the construction of new ‘carbon capture ready’ power plants (to be implemented from 2009).
2. Implementation of the CCS Directive on the geological storage of carbon dioxide into the Polish legislation (to be transposed by 2011).
3. Conducting an information campaign targeted at the general public on the most significant aspects of CCS (until 2012).
4. Implementation of the “Programme for recognition of formations and structures for safe geological CO₂ storage and their monitoring” (between 2009 and 2012).
5. Drawing up and adopting a report presenting the information obtained during the implementation of the programme (in 2012).

Measure 6.6 anticipated active participation in implementing the initiative of the European Commission to build large-scale demonstration facilities for CCS, in particular:

1. Undertaking comprehensive activities on the EU forum aimed at including two Polish CCS installations in the European Commission list of demonstration projects co-financed from the reserve pool of allowances for new ETS system installations (2009-2010).
2. Determining support instruments for Polish CCS projects (2009-2010).
3. Consideration of and making the decision to finance development of CCS technologies under the Operational Programme Infrastructure and Environment (2009–2010).
4. Commencement of implementation of two projects (2009–2010).
5. Preparing the national flagship programme on the development of clean coal technologies, including CCS (2010).

Measure 6.7, entitled “*Applying CCS technologies to support crude oil and natural gas extraction*” envisaged the following:

1. Devising a programme indicating, inter alia, potential sites of application of CCS technologies to support crude oil and natural gas extraction, including an implementation schedule (2010).
2. Consideration and potential inclusion of work on methods to support crude oil and natural gas extraction using CO₂ in the National Research Programme (2009–2010).

Measure 6.8, entitled “*Intensifying research and development on the CCS technology and on new technologies which allow using captured CO₂ as a raw material by other industry branches*”, included:

1. Securing funds of at least PLN 100 million (ca €25 million) for the years 2010–2012 for co-financing of research and development in this field.
2. Establishing a co-operation platform between science and business within the National Research and Development Centre (on an on-going basis).
3. Announcing competitions for projects eligible to support (2009).

For the above measures the Action Plan specified not only deadlines but also who was to be responsible for the implementation of specific tasks, namely: governmental agencies (mostly the Economy Minister, the Environment Minister, the Treasury, the Science Minister and Regional Development Minister) as well as research institutions and companies working in the power and fuel sectors.

Measure 6.5, Task 4 envisaged the implementation of the Programme for recognition of formations and structures for safe geological CO₂ storage and their monitoring. This is probably the most concrete programme on CCS prepared by Poland. It is a research project carried out by the Polish Geological Institute – National Research Institute (PIG), also known as the National Program, and implemented under the auspices of the Ministry of Environment.⁵ The aim of this research is to indicate the potential CO₂ storage sites, meeting the requirements of feasibility, safety and environmental impact. Its aim is also the implementation of a public information campaign on CCS.

⁵ Web page of this project: <http://skladowanie.pgi.gov.pl/>

Under **Measure 6.6**, Task 5 there was an obligation to develop a programme on the development of clean coal technologies, including CCS, in the year 2010. A document, called *Clean Carbon Technologies Development Trends in Poland*, was prepared in September 2010 by the Ministry of Economy.⁶ It is part of the implementation strategy of Measure 6.6 of the *Polish Energy Policy until 2030* and it refers to “clean coal technologies” (CCT). This document is interesting for CCS development in that it contains numerous references to CO₂ and offers to serve the purpose of supporting the construction of demonstration plants for testing and future commercialization of electricity, heat and chemical products with the possibility of capture and geological storage of CO₂. However, the document is imprecise as far as the timeframe and concrete obligations are concerned. Among the most important actions to be taken by the end of 2012 it highlights the following:

- defining national and EU sources of financial support for the CCT pilot projects (demonstration plants), where possible with a CCS component;
- a public awareness campaign explaining to the general public the need to develop a low-carbon economy (using CCT and CCS);
- developing the requirements (Best Available Techniques standards) for issuing IPPC permits, including the capture, transport and storage of CO₂; and
- establishing a legal obligation for new power plants to be built to CCS-ready standards.

Clean Carbon Technologies Development Trends in Poland was intended to be adopted by the Government. However, in July 2013, upon request of the Minister of Economy, the Government decided to discontinue further works on this document. According to the official announcement this was due to the ‘controversies’ surrounding the deployment of CCS technology in Poland and in the EU in general.

Non-governmental roadmaps

Some attempts to provide roadmaps for CCS in Poland were made by independent think-tanks. Probably the most comprehensive was the report prepared by Demos Europe together with the Global CCS Institute, entitled *How to efficiently implement CCS in Poland? Polish CCS Strategy*, published in 2011. This report is the final study completing earlier Demos Europe reports dealing with some specific issues of CCS in Poland.

The final report argues that “*efficient implementation of CCS technology in Poland can deliver long-term reputational and financial advantages to the country. CCS has the potential to not only enhance the capabilities and standing of Polish R&D and scientific centres, but to also help Poland find its place in the global market. However, a comprehensive plan for the development and roll-out of CCS technology is required. Poland needs a strategic decision at a governmental level to embrace CCS technology as a key tool of Polish energy and climate policy*”.⁷

⁶ <http://www.mg.gov.pl/node/11425>

⁷ This and earlier reports can be found at <http://www.demos.europa.eu/index.php?Itemid=75&lang=en>

Another CCS Roadmap for Poland was prepared by an environmental NGO, the Bellona Foundation. *Energy independence policy - CCS Roadmap for Poland* was published in March, 2011 and was presented to the wider public at a conference focusing on the problems of CCS.⁸

Power company (PGE) roadmap

Independently from the above road-maps (but largely coordinated with the governmental road-map) a series of measures based on the internal roadmap were initiated by the company most interested in the demonstration project. In 2009 PGE Elektrownia Bełchatów S.A. initiated actions to support the construction of a demonstration CCS installation. As a result of the Consolidation Programme of the PGE Group, the task was assigned to PGE Górnictwo i Energetyka Konwencjonalna S.A. (PGE GiEK S.A.). The roadmap envisaged that the CCS installation would be integrated with the 858 MW unit which had been operational as of September 2011 in the PGE GiEK SA Oddział Elektrownia Bełchatów (the Bełchatów Power Plant).

PGE's roadmap included the following key components for the full value chain in the validation process of the CCS technology:

- CO₂ Capture: the roadmap anticipated a carbon capture plant of a size equivalent to >250MW and a CO₂ capture efficiency of >85% utilizing the Advanced Amine Process (AAP) & its integration with the 858 MW unit (thus with a capacity of capturing approximately 1.8 million tons of CO₂ per year). This required a modification of the new 858MW unit to allow for the construction of the necessary capture infrastructure and attain "Capture Ready" status;
- CO₂ Transportation: this component consisted of a pipeline and the associated infrastructure to transport the compressed CO₂ from the carbon capture plant to the storage site; and
- CO₂ Storage: injecting pressurized CO₂ into deep saline aquifers for permanent storage.

Following the production of this roadmap a number of activities were undertaken. As far as the CO₂ capture technology was concerned, the "post-combustion" option based on advanced amines was chosen. A comprehensive Front-End Engineering and Design (FEED) study was prepared for the selected option between 2009 and 2011. As the 858MW unit was originally not designed to be coupled with the CO₂ capture installation, works had to be carried out to attain "Capture Ready" status. Gaseous CO₂ from the capture installation was then meant to be compressed to a supercritical state so as to allow for its transportation by way of pipeline.

In 2009, the following three geological structures were identified in the Łódzkie voivodeship for potential storage of CO₂ from the capture plant: (1) Lutomiersk-Tuszyn-Pabianice-Bełchatow, (2) Budziszewice and (3) Wojszyce. A preliminary determination was then made for the routing of three pipelines to those storage sites on the basis of a transport-specific feasibility study, also completed in 2009.

⁸ English version available at http://www.bellona.org/filearchive/fil_Insuring_Energy_Independence_-_A_CCS_Roadmap_for_Poland.pdf

Following a comprehensive geological study and analysis carried out in the period between 2009 and 2011 and based on expert recommendations, the Wojszyce structure (in the north part of the Łódzkie voivodeship) was selected at the beginning of 2012 as the most appropriate site from a geological point of view for the continuation of works. Further studies still needed to be done to get a detailed characterization of the site and thereby to confirm its suitability for safe CO₂ storage of CO₂ at an industrial scale.

This storage site selection enabled the commencement of preparatory works in the transport component in June 2012. These preparatory works included the following: route selection for the CO₂ pipelines; inclusion of the pipeline routing in the Local Plans for Spatial Development of the relevant communes; preparation of the Environmental Impact Assessment report; obtaining the 'environmental decision' from the Environment Minister; and preparing elements of the terms of reference for a public tender with the aim of contracting a pipeline constructor.

In addition to these activities, steps were taken to initiate the necessary permitting procedures, obtain funding and also to engage in a wide public relations campaign.

Official permitting procedures started in October 2009 when an application was submitted to Kleszczów local authorities for a Decision on Environmental Conditions for a CO₂ capture installation integrated within the newly built 858MW unit in the PGE Elektrownia Bełchatów S.A. Following an environmental impact assessment and the necessary public participation, the Decision on Environmental Conditions was issued by the local authorities in December 2009.

Meanwhile, in November 2009, a FEED Services Agreement was signed with Alstom Carbon Capture concerning the carbon capture plant. Pursuant to this agreement, Alstom was charged with putting together a dossier to obtain a building permit for the carbon capture installation, preparing certain technical specifications and making an estimation of the investment cost. Alstom submitted the documentation for the building permit at the end of December 2009. At the end of January 2010, the Starost of Bełchatów issued a building permit for a carbon capture installation which was to be fully integrated with the newly built 858 MW unit in the PGE Elektrownia Bełchatów SA. The building permit took effect at the end of February 2010.

Meanwhile, in July 2009 an application had been submitted for funding under the European Energy Program for Recovery (EEPR). A grant of €180 million was awarded and the contract was signed in May 2010. In February 2011, an application was submitted for funding under the EU's NER300 programme.

A public campaign was initiated in August 2010. In March 2011, a series of briefings with representatives of local administration were held, aimed at spreading information about the CCS project planned for 2012. Following this, a series of briefings took place between July and September 2012 with the representatives of Commune Councils of Communes through which CO₂ pipelines were being routed.

On 6 June 2013, the Board of PGE Górnictwo i Energetyka Konwencjonalna SA officially confirmed its decision (apparently taken already in February) to abandon developing a CCS demonstration project.⁹ The Board cited the following grounds for its decision:

- A lack of proper funding (the cost was estimated at €600 million);
- A lack of an adequate legal framework;
- The belated transposition of the EU CCS Directive in Poland; and
- A lack of a clear framework for the transport of CO₂.

This decision coincided with the decision of the Government to discontinue further works on the CCS roadmap for Poland (the document called Clean Carbon Technologies development trends in Poland). Both decisions appear to be clearly mutually linked, but many factors seem to indicate that the decisive factor was a purely commercially driven decision taken by the power company PGE.

3. Financial incentives (and disincentives)

The abovementioned Action Plan for the Years 2009-2012 indicated an array of financial incentives from various sources, domestic and non-domestic, to support the power companies in their deployment of CCS technology.

The PGE GiEK SA's CCS Project was selected, along with other five European CCS projects, to receive €180 million in funding under the European Energy Programme for Recovery (EEPR). Awarding the subsidy and signing the relevant Grant Agreement in May 2010 was essential for the project's implementation, especially in its initial phase (2009-2011). Cooperation with other EEPR subsidized projects was initiated in 2010 as part of the CCS Project Network, set up under the auspices of the European Commission. The goal of the network is to share knowledge and experiences from the realization of CCS demonstration projects throughout Europe.

In addition to the €180 million funding granted under the EEPR, PGE GiEK SA sought additional funding from sources such as NER300, the Norwegian Financial Mechanism, EU ETS auctioning revenues and domestic support mechanisms. NER300 is a mechanism managed jointly by the European Commission, the European Investment Bank and the Member States, and relies on the sale of 300 million emissions allowances from the Phase III New Entrants' Reserve under the EU ETS. Its aim is to provide financial support for CCS demonstration projects and innovative renewable energy technologies through two rounds of funding. Following the first call for applications, the European Commission released an interim shortlist in July 2012 of all the CCS projects which had responded to the call. The Bełchatów CCS Project appeared second on this provisional list of candidates for being awarded funding, but the Polish government was later unable to provide the necessary financial backing for the Bełchatów project to qualify. It should be pointed out that none of the CCS projects which had applied for this first round of NER300 funding were successful.

Apart from financial incentives to undertake CCS activities, such activities themselves are to be subject to the standard scheme of charges under the GMLA 2011 which itself is part of a

⁹ <http://www.pgegiiek.pl/index.php/2013/06/06/rezygnacja-z-budowy-demonstracyjnego-projektu-ccs-pge-giek-sa/>

comprehensive general scheme of environmental charges.¹⁰ The general scheme, which has been developed in Poland to implement the pollution pays principle, covers a broad range of activities related to the environment and is considered an important instrument of environmental policy and a source of financing for environmental protection.

4. Policy preferences regarding options for storage

It is evident that Poland favours onshore storage of CO₂. The clearest evidence of this is the geographical scope of the main research strategy in this sector, the Programme for recognition of formations and structures for safe geological CO₂ storage and their monitoring, extending mainly over the land territory of Poland. Poland is proud of its large potential for onshore underground storage of CO₂, the conditions of which are estimated to be the most favourable in Europe. The proximity of those potential storage sites to the industrial installations where the CO₂ is captured is an important factor as well.

CO₂ storage under the seabed (offshore storage) is also considered as a possibility in Poland, albeit on a significantly smaller scale and mainly in the context of Enhanced Oil Recovery (EOR). A few pilot projects are to be launched by the private sector in this respect. The LOTOS company for example, an important fuel sector player, presented plans to store CO₂ in oil deposits located under the Baltic sea in 2010, and smaller research projects are also being developed.

Polish authorities have decided to invest in research on offshore CO₂ storage. The most significant initiative so far is the “Program of enhanced oil and natural gas recovery from domestic deposits using underground CO₂ injection”, launched by the Ministry of the Environment in May 2011. The objective of this program is to develop a methodology to evaluate the potential of additional oil and natural gas extraction through injecting CO₂ into oil deposits (CO₂-EOR) and natural gas (CO₂-EGR). The 10 most promising oil and natural gas deposits for the application of this technology will be selected for this evaluation.

It must be mentioned, however, that the option of storing CO₂ offshore has, at least until now, been considered as only supplementary to onshore storage. Consequently, the related research activities take place on a rather limited scale in comparison to research on storage on the mainland. Nonetheless, the recently adopted legal framework for CCS applies to offshore as well as onshore storage and sets out the role of maritime authorities in permitting offshore CCS activities. The option of transporting CO₂ for storage outside Poland does not seem to be considered as a viable option, mainly due to the challenges of large-scale transportation of CO₂.

III. Legal process for the transposition of the CCS Directive

1. Applicable procedures and key actors

According to the general rules governing the legislative procedure in Poland, each Ministry is responsible for preparing a draft of so-called “Principles for a draft law” within the sphere of its

¹⁰ For more on the general scheme see for example P. Małecki, ‘The role of ecological fees in the functioning of Polish environmental protection and water management funds’ *Economic and Environmental Studies* Vol. 10, No. 1 (13/2010)136-148, March 2010

competence. This document is meant to outline the main normative content of the proposed law, clearly indicating its scope of application, main policy choices and the legal tools to be employed. The principles are subject to wide consultation, including public and inter-agency consultations. Following approval by the Council of Ministers, the Draft Principles are then forwarded to the Governmental Legislative Centre which is responsible for preparing the detailed provisions for the draft law to be submitted to Parliament.

Formally, the Ministry for Environment was the key ministry involved in the transposition of the EU CCS Directive. The Ministry for Environment was responsible for preparing the Draft Principles and then for assisting in the preparation of the draft law by the Governmental Legislative Centre. However, in the case of CCS, in practice an equally important role was played by the Economy Minister and Foreign Affairs Minister (who is also responsible for EU matters).

2. Legislative technique chosen

Poland's Government has chosen to treat CCS activities in a similar way to other geological and mining activities and therefore to transpose the CCS Directive via inclusion into existing legislation by way of amendment. The adoption of separate legislation devoted to the problems of CCS was rejected early in the transposition process. The reason for Poland's approach was the concern that a specific CCS act would be neither sufficiently transparent nor sufficiently clear to allow consistent implementation. This would be due to the fact that any separate law would still need to include cross-referencing to the Geological and Mining Law as the main piece of legislation ruling this field of economic activity in Poland. According to the Government, the nature of CCS activity is exactly the same as that of the activities regulated by the Geological and Mining Law, and the numerous cross-references undoubtedly required would constitute a significant impediment to their implementation.

Therefore, it was concluded that the most suitable solution was to include the provisions transposing the CCS Directive into the existing legal regulations instead of creating a new statute/act(s) dedicated to this activity.

3. Transposition process

Poland adopted the main legal instrument to transpose the CCS Directive into national law in September 2013 with the *Act of 23 September 2013 on the amendment of the geological and mining law act and of some other acts* (Dz.U.2013 poz 1238) (the CCS Amendment Act). Thus, Poland failed to comply with the deadline set by the Directive for 25 June 2011, as well as with the work schedule defined in 2009 by the Ministry of Environment which, as previously mentioned, is generally responsible for the transposition of environmental directives.¹¹

The original time-frame assumed that the first stage of the legislative procedure (preparation of the Principles for the draft law to transpose the CCS Directive) would be completed in March 2011 with the Principles being adopted by the Council of Ministers and transmitted to the Legislative Centre of the Government. Indeed, the first version had already been prepared in 2009 and after public consultation in November 2009 it was subject to heavy negotiations within the framework of interdepartmental consultations. Finally, after preparing several versions the Principles were

¹¹ http://mos.gov.pl/g2/big/2011_04/2563622360cd3a6a7ba7efad36e8a6f0.pdf

adopted by the Council of Ministers on 15 March 2011 and consequently transmitted to the Legislative Centre of the Government, which was responsible for the process of preparing the draft law.

The Principles proposed, among other things, that the Directive was to be transposed by way of amending existing legislation by including the bulk of the provisions on CCS in the Geological and Mining Law, as well as adding some provisions to other legal acts. This required a number of detailed legal issues to be resolved in order to fit the CCS framework, as laid down by the Directive, into the existing structure of the Geological and Mining Law. Meanwhile, the Geological and Mining Law itself was undergoing various significant changes, including a replacement of the old text from 1994 with the new GMLA of 2011. Apart from this, some major policy issues concerning CCS remained under discussion because of the contrasting views between different governmental agencies. One of the questions was whether the transposing legislation could be limited just to demonstration projects or whether it would have to encompass commercial CCS activities as well. The Government decided to put this question to the European Commission and asked for an opinion in December 2012. The Commission replied at the end of February 2013 with a short statement which referred to Art. 4(1) in conjunction with Art. 6(2) of the CCS Directive as legal basis for allowing some limitation in applying CCS.

In April, the draft law was approved by the Council of Ministers and in June 2013 it was submitted to the Sejm (the Lower House of Parliament). Following intensive discussions in the relevant subcommittee and commissions, the law was passed on 30 August (253 votes for and 185 votes against) and submitted to the Senate (the Upper House). On 20 September 2013, the Senate submitted its proposals for amendments. The amendments, concerning mostly technical issues, were all accepted and the law was passed on 27 September 2013 as the *Act of 27 September 2013 on the Amendment of the Geological and Mining Law Act and of some other Acts (the CCS Amendment Act)*. On 17 October 2013 it was signed by the President. It was published in the Journal of laws (DZ.U Nr 1238 of 2013) and entered into force on 24 November 2013.

The CCS transposition package in Poland also included changes to the EIA scheme. The Regulations of the Council of Ministers of 9 November 2010 on Projects Likely to have Significant Effects on the Environment were amended in August 2013, inter alia in order to transpose Art. 31 of the CCS Directive. The respective amendments included adding to the list of projects subject to mandatory EIA (group I projects): pipelines for the transport of CO₂, storage sites and installations for the capture of CO₂ streams from installations are now included in group I projects where the total yearly capture of CO₂ is 1.5 megatons or more. The amendment also added to the list of projects where individual screening is required (group II projects) and included not only those required by Art. 31 of the CCS Directive (CCS pipelines and installations not covered in group I) but also some activities related to prospecting for and exploration of the underground storage complex.

IV. The Regulatory scheme and administrative framework for CCS in Poland

1. Regulatory scheme

Permitting

The Polish CCS permitting scheme for both exploration and storage encompasses a two stage permitting procedure, similar to other underground activities subject to the GMLA. For both exploration and storage activities, the operator must first obtain a so-called Decision on Environmental Conditions and, in a second stage, the respective permit (concession).

Decisions on Environmental Conditions (sometimes referred to as ‘EIA decisions’) for CCS activities are issued by local authorities at commune (Gmina) level (i.e. the mayor, the town mayor or the president of the city). Before issuing these decisions they must consult with the respective Regional Environmental Protection Directorate, which is a statutory consultee in case of all decisions on environmental conditions granted by local authorities.

The Exploration Permit, required pursuant to Art. 5 of the CCS Directive, takes the form of two separate permits, the requirements for which are set out in the GMLA: (1) a concession for prospecting for a underground storage complex for CO₂, and (2) a concession for the exploration of the underground storage complex for CO₂. These two permits (concessions) can be granted separately or jointly (see Figure 1, below).

The GMLA 2011 (as amended) sets out the following definitions:

- “prospecting for” means to carry out geological work to identify and initially document the mineral deposits, ground waters or an underground storage complex for carbon dioxide; and
- “exploration” means the performance of geological works in the area of a mineral, groundwater deposit or an underground storage complex for carbon dioxide with respect to which preliminary documentation was performed.

Both concessions are to be granted by the Environment Minister after obtaining a non-binding opinion of the respective local authorities (see below – “Role of regional and local authorities”).

The Storage Permit, also required pursuant to Art. 5 of the CCS Directive, takes the form of a concession for the underground storage of CO₂. The procedure for granting the CO₂ storage concession, as well as the requirements regarding the application and the content of the concession, have been designed in the same way as concessions for other underground activities subject to the GMLA, with the addition of some specific obligations stemming from the CCS Directive. In particular, special arrangements must be made in relation to financial security (see Figure 2, below).

The CO₂ storage concession is to be granted by the Environment Minister after having obtained the approval of the Economy Minister and the opinion of the European Commission. Other than for activities in off-shore areas, the approval of local authorities is also needed (see below – “The role of regional and local authorities”).

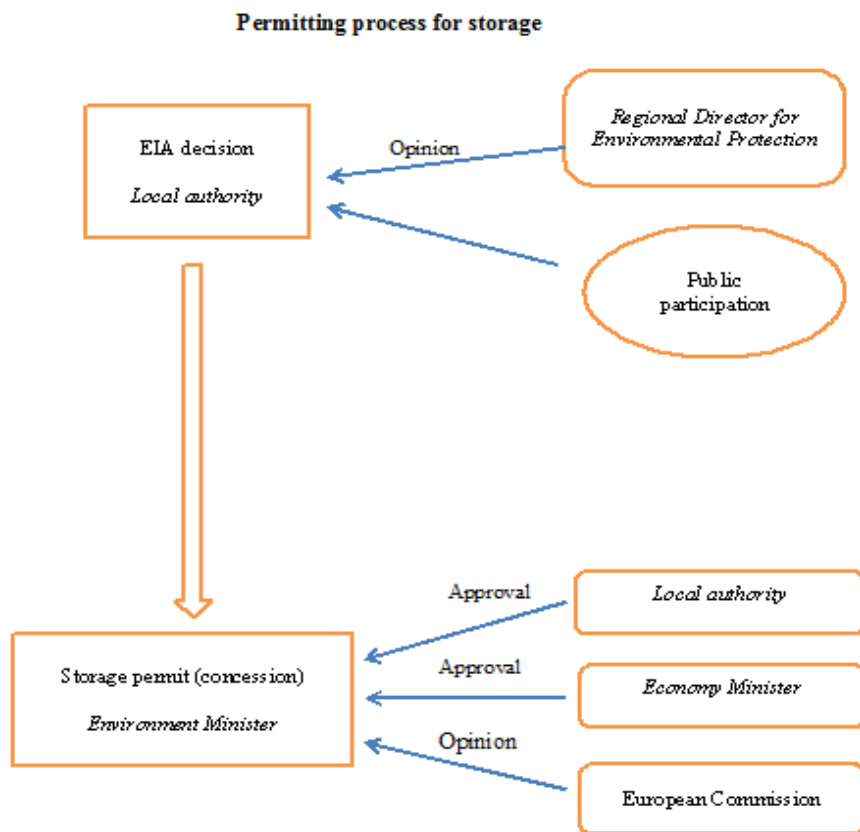


Figure 1 – The permitting process for CO₂ exploration operations

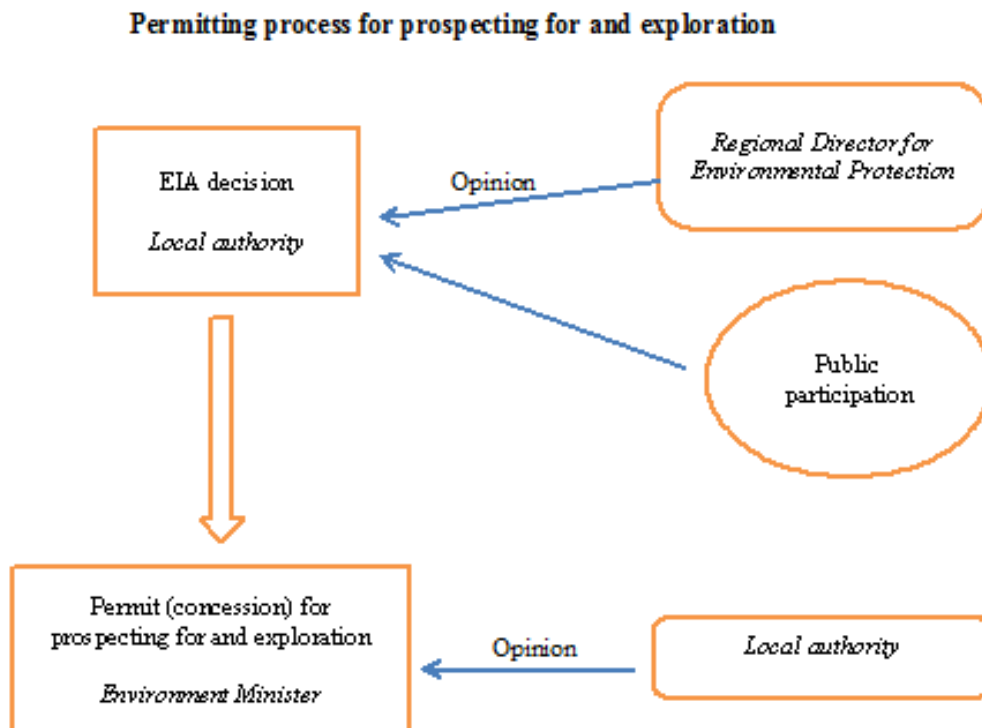


Figure 2 – The permitting process for CO₂ storage operations

Operation, closure and transfer of responsibility

The requirements regarding the operation of CCS storage sites, safety measures, reporting etc., have also been designed in the same way as other underground activities subject to the GMLA, with addition of some specific obligations stemming from the CCS Directive. These provisions apply only to CCS storage sites but are designed in a way to fit into the general scheme under the GMLA. Generally, the rules of the GMLA regarding the operation of the mining installation apply also to the operation of CCS storage sites. There are however some additional, specific rules regarding permit amendment and withdrawal.

The regulatory functions related to overseeing the operation of storage sites, including in relation to reporting and inspections, are to be performed, as is the case for other underground activities subject to the GMLA, by the mining authorities. In the context of CO₂ storage these functions are to be carried out by the President (Head) of the State Mining Authority.

The real novelty for a regulatory scheme under the GMLA are some of the arrangements made in relation to closure and the transfer of responsibility, which reflect the obligations under the CCS Directive. A new institution is created in order to assume the tasks related to post-closure activities and fulfil obligations stemming from the transfer of responsibility. This is the National Administrator of Underground CO₂ Storage Sites (KAPS CO₂).

Decisions on site closure and transfer of responsibility are to be taken by the Environment Minister, which is also the competent authority for issuing storage concessions. A decision on transfer of responsibility can only be made after having consulted the President (Head) of State Mining Authority, the European Commission and the respective local authorities.

Charges

CCS activities, as already mentioned, are subject to the general scheme for charges envisaged generally for underground activities subject to the GMLA. Charge rates for prospecting for or the exploration of underground CO₂ storage complexes are fixed in Art. 133 GMLA.

Art. 133 GMLA 2011 reads as follows:

“1. An entrepreneur who gained the concession for prospecting for or exploration of mineral deposits or prospecting for or exploration of the complex of underground storage of carbon dioxide, shall pay a charge to be established in the concession as a product charge rate, and expressed in square kilometres of land area covered by the concession.

2. The rate of the charge for the activities of prospecting for mineral deposits per square kilometre is for:

1) hard coal and uranium ore - 529.05 zł;¹²

2) lignite - 211.62 zł;

3) other minerals, deposits of which are covered by a mining property - 105.81 zł.

3. The rate of the charge for exploration of mineral deposits, or jointly for prospecting for and exploration of mineral deposits is twice the rate specified in para 2

¹² | Zloty = €0.24 (exchange rate of 4 March 2014)

3a. The rate of the charge for the activities of prospecting for of the complex of underground storage of carbon dioxide is 105.81 zł.

3b. The rate of the charge for exploration of the complex of underground storage of carbon dioxide, or jointly for prospecting for and exploration of the complex of underground storage of carbon dioxide is twice the rate specified in para 3a.”

The rate for the underground storage of CO₂ is fixed in Art. 135 of GMLA 2011, which also fixes charged for similar activities.

Art. 135 GMLA 2011 reads as follows:

“1. An entrepreneur who has obtained a concession to:

1) underground or non-reservoir storage of substances

2) underground waste storage

3) underground storage of carbon dioxide

- pays a charge as determined by multiplying the charge rate and quantity of substances, waste or carbon dioxide , which in the accounting period was introduced into the ground, including underground mining excavations.

2. The rates of charges for storage are:

1) gas substances - 1,61 zł/thousand. m³; 2) liquid substances - 3.19 zł/t; 3) other substances - 1,60 zł/t

3. The rates of charges for waste disposal are:

1) Hazardous - 65.79 zł/t excluding insulation materials which are waste and asbestos-containing construction for which the rate is 0.0 zł/t;

2) inert - 3.79 zł/t;

3) other than hazardous and inert - 5.06 zł/t

4. The rate for underground storage of carbon dioxide is 5,06 zł/t

Revenues from charges for CCS activities are subject to the same procedures as in case of revenues from other charges. A proportion goes to the municipality where CCS infrastructure will be established, while the rest will be collected by the National Fund of Environmental Protection and Water Management and used for funding functions of National Administrator of Underground CO₂ Storage Sites (KAPS CO₂).”

2. Main administrative bodies involved in the implementation of the Directive

The Minister of Environment is the key administrative body responsible for the transposition of the CCS Directive and its implementation in practice. In particular it will also have a central role in the administrative procedure of granting CCS-related permits (for prospecting for and the exploration of the complex of underground storage of CO₂ and for the underground storage of CO₂).

Another central administrative body of great importance is the Ministry of Economy. It has been heavily involved in the process of transposition as this is the key governmental agency responsible for the implementation strategy of Measure 6.6 of the Polish Energy Policy until 2030 (this measure refers to “clean coal technologies” (CCT)), called “Clean Carbon Technologies

development trends in Poland” (see above). The Economy Ministry will not however have any important regulatory functions in relation to CCS projects.

An important role in permitting CCS activities is envisaged for local authorities who are responsible for issuing so-called Decisions on Environmental Conditions (which will be issued prior to the respective permits). These authorities will also be involved in granting the respective permits and making some other decisions, including decisions regarding transfer of responsibility (see below).

In case of offshore CCS activities the respective maritime authorities will be involved: the general rule in the GMLA is that all decisions which apply to internal marine waters, the territorial sea as well as the coastal belt¹³ need to be agreed with the Director of the competent Maritime Authority. Thus, they will be also involved in the procedure of all the respective permits and other decisions such as those regarding transfer of responsibility.

The actual process of CO₂ storage will be subject to the regulatory control of the President (Head) of the State Mining Authority who will be responsible for overseeing proper conduct of CCS operators in relation to their duties concerning monitoring, reporting, etc. The President (Head) of State Mining Authority will be also involved (as statutory consultee) in the procedure leading to transfer of responsibility.

The National Geological Institute - National Research Institute (PIG) should also be mentioned. It has been involved in a number of relevant research programs and also in the preparation and implementation of legislation on CCS. Most importantly, it is supposed to become KAPS CO₂. It will also assume responsibility for the proper functioning of storage sites in certain circumstances. This function will be funded by means coming from so-called ‘guarantee fees’ paid by operators.

Apart from the above key players, a number of other authorities (e.g. Regional Environmental Protection Directorates) or institutions (e.g. the National Fund for Environmental Protection and Water Management) will be involved in certain specific stages of regulatory control of various CCS related activities.

The role of regional and local, self-governmental authorities

The regulatory framework for CCS activities in Poland envisages an important role for local authorities at Gmina level but almost no role at all for self-governmental authorities at regional and Poviast level. The local authorities at Gmina level, geographically relevant for the respective CCS activities, will be involved in both permitting these activities and in the transfer of responsibility.

¹³ The belt of land adjacent to the sea is called the ‘coastal belt’. It is composed of the ‘technical belt’ (adjacent directly to the sea is between 10 and 1000 m wide) and the ‘protective belt’ (the outer part of the coastal belt, 100 - 2500 m wide). The existence of the coastal belt (similarly to the existence and division of internal marine waters, territorial sea and the EEZ) is foreseen by Marine Areas Act (see below). Borders (breadth) of the coastal belt (i.e. of the technical and protective belts) are to be determined by an order of the Director of the relevant Maritime Office. The executive regulation by the Council of Ministers (issued under the Marine Areas Act) provides for criteria for determining the breadth of coastal belt.

First, as mentioned above, local authorities at Gmina level will be competent to issue Decisions on Environmental Conditions (also referred to as EIA decisions) in relation to the prospecting for and exploration of the underground CO₂ storage complex, the underground storage of CO₂ and the transportation of CO₂. Obtaining the relevant Decisions on Environmental Conditions constitutes the first mandatory part of multi-stage decision making (development consent) for all projects subject to the EIA scheme under the EIA Directive. As a general principle, the competence for issuing these decisions belongs to the local authorities at Gmina level (although in case of some projects under the EIA Directive some other authorities are competent).

The competence to issue Decisions on Environmental Conditions in relation to CCS activities represents an important role for authorities at Gmina level in CCS decision-making, but their powers are not wholly unconstrained. The general rules of the EIA Act of 2008 apply here, and this envisages only a very limited number of reasons for refusing to grant a Decision on Environmental Conditions and thus refusing to authorize a project in a given location. Note that the fact that the local population may be opposed to CSS is not listed as a sufficient reason to refuse to authorize a project.

Any reasons for refusal must be based on objective criteria. These include a significant adverse impact on a Natura 2000 site (under the EU Habitats Directive) or on the achievement of environmental objectives for bodies of water (under the EU Water Framework Directive). They both reflect objective factors and thus cannot be used to reflect any prejudices against CCS or policy preferences of local authorities. However, it is a general requirement that any proposed activity must comply with the local urban spatial development plan. The adoption of such a plan falls within the competence of local authorities, and there is a risk that they may use this instrument to pursue their own CCS-related policy goals. But, there are provisions that allow central government to force local authorities to include within their plans certain projects considered to be serving “public goals”. These include provisions in the GMLA 2011 designed to promote geological and mining activities (see below), and thus they could be used for the benefit of CCS activities covered by this Act. One should mention here that the CCS Amendment Act introduced also some changes to the Management of Real Estate Act of 1997 with the aim of listing CCS activities as activities serving “public goals”, thus providing them with the preferential legal status referred to above. It follows that non-compliance with the local plan may be used as a short-term measure to refuse authorising CCS activities, but cannot be considered legally sufficient to justify a permanent ban.

A far more effective instrument for local authorities could be the power given to competent public authorities in the EIA Act 2008, which entitles them to invite a project proponent to implement the project in an alternative way. If the proponent refuses, the authority is allowed to refuse to authorise the project. This competence however cannot be considered as unlimited discretion given to the competent authorities; the invitation to deploy alternative ways of implementing a project must stem from the EIA procedure, and this limits the number of alternatives to be offered to those examined in the EIA report. On the other hand, it is clear that the local population may exert some influence on this choice as, following the requirements stemming from the Aarhus Convention, the results of public participation must be taken into account when taking the decision.

Another possibility for influencing the permitting process for CCS activities is at the concession stage. In the case of concessions for prospecting and exploration the role of local authorities is limited to providing an opinion to the competent authority (the Environment Minister). The opinion may address any given aspect of the activity to be authorised, including a proposal to refuse the concession. The opinion however is non-binding upon the Minister.

Slightly different is the situation with the concession for CO₂ storage, whereby – similarly to granting concessions for other activities such as mining – the concession must be approved by the respective local authorities. However, their role is limited to assessing the proposed activity in light of the conditions stipulated in Art. 7 of GMLA 2011.¹⁴ This provision should be seen in the context of Art. 95 GMLA 2011 which includes a special mechanism for introducing documented mineral deposits into local land-use planning documents, regardless of the views of local authorities. Under the CCS amendments, this special legal instrument also covers the complexes of underground storage of CO₂.¹⁵

It is therefore clear that the initial announcements of the Minister of the Environment¹⁶ and the official position in the Principles for the draft law to transpose the CCS Directive have not been fully reflected in the final legal instrument as adopted. The initial announcements asserted that in order to grant a concession for any activity connected to the storage of CO₂, the licensing authority would be obliged to seek the consent of local authorities. The absence of such consent would by definition lead to a negative decision. In theory, local authorities would thereby have been able to veto the storage of CO₂, regardless of their motives. It is true that authorities have a number of opportunities to push for a negative decision, but the final, adopted text makes their powers subject to a number of conditions – as a result, local opposition to CCS would not in itself be sufficient legal justification to ban the activity.

Thus, while the initial announcements and the Principles suggested a very special treatment of CCS as compared to other activities which are regulated by the GMLA – in practice, this treatment in relation to the possibilities granted to local authorities is not much different. The general

¹⁴ Art. 7 GMLA reads:

1. Undertaking and execution of activities defined by this law is allowed only if it doesn't violate any specific destination of the properties foreseen in the local urban spatial development plan and in separate regulations.
2. In case of the absence of the local urban spatial development plan, undertaking and execution of activities defined by this law is permissible only in case if it doesn't violate the way of using the property foreseen in the study of conditions and directions of spatial management, and in separate regulations.

¹⁵ Art. 95 GMLA 2011 reads:

1. The documented mineral deposits and documented groundwater resources, within the limits of the protection zones drafting and protective areas of the groundwater reservoirs, as well as documented complex of underground storage of carbon dioxide, with the aim of their protection shall be presented in the conditions and directions of spatial management of the municipality and local spatial development plans of municipalities and the land spatial management plans of the voivodships.
2. Within the period of 2 years from the date of the geological documentation approval by the competent geological administration authority, the area of the documented mineral deposits and the area of the documented complex of underground storage of carbon dioxide shall be obligatorily introduced into the study of conditions and directions of spatial management of the municipality.

¹⁶ See the report "Geologiczna Sekwestracja Geologiczna Sekwestracja Co2 Dla Zmian Klimatu (CCS)", Available at: http://mos.gov.pl/g2/big/2011_04/2563622360cd3a6a7ba7efad36e8a6f0.pdf (last visited on 4 March 2014)

scheme applies, and while this leaves some opportunities to local authorities to ban the activities concerned, these opportunities are very limited. Pretty much the same approach applies to the capture and transportation of CO₂ which do not fall under the scope of the GMLA but which are subject to similar permitting rules (including the need to obtain a decision on environmental conditions – EIA decision).

VI. Ownership of pore space and conflicting uses of the storage site

The Polish legal system defines clearly the ownership of the interior of the Earth, including pore space suitable for CO₂ storage, as well as other parts of the bedrock, including saline aquifers which might be used for storage. In both cases, under national law the owner of the interior of Earth's crust is the State, which can allow third parties to make use of it by issuing special permits (mining concessions). The issue is reflected by the concept of so called "mining ownership" and is regulated in Art. 10 of GMLA 2011. According to this article, mining ownership covers "deposits of hydrocarbons, hard coal, methane occurring as accompanying mineral, lignite, metal ores with the exception of soddy iron ores, native metals, ores of radioactive elements, native sulphur, rock salt, potassium salt, potassium-magnesium salt, gypsum and anhydrite, gemstones, despite the place of their occurrence" (para 1) and also "deposits of curative waters, thermal waters and brines" (para 2). Furthermore, mining ownership covers also "parts of the rock mass located outside the spatial borders of the land property, in particular located within the borders of maritime areas of the Republic of Poland" (para 4). The key provision is paragraph 5 which stipulates that "the right of mining ownership is owned by the State Treasury". Similarly, Art. 10(1a) of the Water Law of 2001 stipulates that "the waters of the territorial sea, internal waters, together with internal sea waters of Gulf of Gdansk, inland surface flowing water and groundwater are the property of the Treasury".

According to Art. 12 of GMLA 2011 "the State Treasury, with the exclusion of other persons, can benefit from the subject of mining properties or dispose of its rights of property exclusively by establishing the mining usufruct". Thus the State, having mining ownership, allows third parties to make use of it by issuing special permits (mining concessions) establishing so called "mining usufruct". According to Art. 13 of GMLA 2011 this is to be done in the way of written agreement which shall be "signed for the restricted period, no longer than 50 years".

One should add that the general rule in granting a "mining usufruct" under GMLA 2011 is that a person "who explored the mineral deposit or a complex of underground storage of carbon dioxide, being the subject of mining ownership, and documented in sufficiently to enable preparation of deposit development plan or a underground storage of carbon dioxide development plan, as well as obtained a decision approving the geological documentation of the deposit or complex, may demand the establishment of the mining usufruct for its own benefit, with priority over other parties".¹⁷

As far as interaction between CCS activities and other potential or existing uses is concerned, in principle the approach is the same for CCS as in case for other activities subject to a mining concession. According to Art. 16(1) of GMLA 2011 "the mining usufructuary may, in order to

¹⁷ Art. 15 GMLA 2011

undertake the activities regulated by this Act, with the exclusion of other parties, use the space covered by this usufruct. In particular, the mining usufructuary may undertake appropriately the geological operations, exploit minerals from deposits, undertake the activity of underground non-reservoir storage of substances, underground storage of waste or underground storage of carbon dioxide, and perform activity defined in Art. 2(1).” However, this principle is reinforced by a provision¹⁸ that clearly says that within the mining area delimited in the concession for underground storage of carbon dioxide no other activity is allowed which could affect the safety of the underground storage of carbon dioxide unless the operator who intends to carry out such activity proves there is no risk in this respect.

Furthermore, according to Art. 19(1) GMLA 2011, the “the entrepreneur who has been granted a concession for exploitation of hydrocarbons, hard coal, lignite, or non-reservoir underground storage of hydrocarbons or underground storage of carbon dioxide, may demand the buyout of the real estate or a part thereof located in the mining area, to the extent necessary to perform the intended activities”.

There is also the general rule in Art. 108(4) of GMLA 2011 which stipulates that “[if] within the boundaries of the mining area the performance of works connected with the exploration of mineral deposits or prospecting for the mineral deposits or groundwater, prospecting for or exploration of the complex of underground storage of carbon dioxide, is conducted or planned, or if the mining areas are adjacent to each other, in the mining plant operations plan the interdependencies that occur are taken into account and it provides the appropriate organizational and technical measures, necessary to ensure the safety of work and general safety and protection of individual mineral deposits and other environmental elements”.

Finally, the CCS Amendment Act also introduced some changes to the Management of Real Estate Act of 1997 with the aim to list CCS activities as activities serving “public goals”. This gives them preferential status over most other commercial activities, which are normally not marked as activities serving “public goals”.

VII. Liability and transfer of responsibility

The general rule in the GMLA 2011 is that the operator is liable for any damage caused by the activity regulated by this Act.¹⁹ The operator, under Art. 39(1) of GMLA 2011, is responsible in particular for all “the obligations concerning environmental protection and those related to the closing down of the mining plant” and “withdrawal of the concession, the expiry or loss of its validity, whatever the reason” does not release the operator from these obligations. The scope and manner of fulfilling these obligations²⁰ shall be defined in the respective mining installation operation plan. If the activity does not require a mining installation operation plan, then the concession authority, after consulting local authorities, must define them in the relevant decision proclaiming termination (withdrawal, expiry or loss of validity) of the concession. If the operator

¹⁸ Art. 127b of GMLA 2011

¹⁹ Art. 145 GMLA 2011

²⁰ Art. 39 para 2 of GMLA 2011

no longer exists, responsibility passes to its legal successor, and if it too does not exist, to any person holding legal title to the respective real estate.²¹

In the context of CO₂ storage, the GMLA's general rules have been significantly modified following the requirements in the CCS Directive. The most profound difference is that where the operator ceases to operate a storage site – regardless of the reasons for doing so – the related obligations are to be performed by a special body created for this purpose. On the basis of Art. 163a GMLA, the newly established KAPS CO₂ (see above) shall assume responsibility for the post-closure obligations of the storage sites. The functions of KAPS CO₂, as laid down in Art. 163b, are to be performed by the National Geological Institute - National Research Institute (PIG).

The transposing legislation in Poland differentiates between “transfer of responsibility” and “takeover of responsibility”. “Transfer of responsibility” is a routine consequence of the closure of the storage site, while “takeover” is a consequence of the withdrawal of the permit. In both cases the obligations are to be assumed by KAPS CO₂ and in both cases these will be funded from the financial mechanism established for that purpose and based on the financial contributions from the operator (see below – “Financial security”). In both cases the responsibility of KAPS CO₂ is assumed as a result of the decision of the concession authority (the Environment Minister).

In the case of “takeover of responsibility” there is a set of special rules²² allowing KAPS CO₂ to assume all the privileges and duties stemming from the decisions related to the respective mining plant. Also, all the relevant documentation shall be immediately submitted to KAPS CO₂ by the former operator. Finally, from the day that KAPS CO₂ assumes responsibility, all the property rights and other rights pertaining to the mining installation are transferred, without compensation, to the State Treasury.

VIII. Financial security and the financial mechanism

There are two separate legal institutions envisaged in Polish law to transpose the provisions of Arts 19 and 20 of the CCS Directive: respectively, “financial security” and “security means”.

Financial security

Financial security is meant to ensure that all the obligations imposed in the concession for the underground storage of CO₂ will be fulfilled. The legal scheme for financial security related to CO₂ storage is separated out from the general legal scheme for financial security related to other activities subject to the GMLA 2011. Under the general scheme,²³ financial security is mandatory only in the case of underground storage of waste, while in the case of all other activities the establishment of financial security is not a mandatory requirement and may be required only “if this is warranted by a particularly important interest of the state or by a particularly important public interest, in particular an interest associated with environmental protection or economy of the country”.²⁴

²¹ Art. 39 para 3 of GMLA 2011

²² See Arts. 39a-39c of GMLA 2011

²³ Arts. 28 of GMLA 2011

²⁴ Arts. 28 para 2 of GMLA 2011

In the context of CO₂ storage, the establishment of financial security is a mandatory requirement (a precondition for granting a CO₂ storage concession). The respective legal scheme²⁵ is similar to the general rules on financial security but more elaborated. Thus, as with the general scheme, the form, scope and the manner of the financial security are to be determined by the concession authority during the concession procedure in the form of a separate order which may be subject to appeal. The legal scheme for financial security related to CO₂ storage envisages however more forms of financial security compared to the general scheme. These include monetary funds, bank guarantees, insurance guarantee or civil insurance of the operator and may be established in one or several of these forms. The storage concession may only be granted if proof of the financial security is presented. Financial security in the form of monetary funds is not included into the bankruptcy estate.²⁶

The financial security for CO₂ storage covers obligations concerning the operation of the underground storage of CO₂ and obligations concerning the so-called “liquidation of the mining installation” (closure and post-closure). Obligations concerning the operation include financing costs related to monitoring, remedial actions, accounting for emissions in case of leakages as well as the costs of preventive and remedial actions related to damages subject to legislation on environmental damages (i.e. the Polish transposition of the EU Environmental Liability Directive) and compensation for damages, which were released before the closure of the storage site.²⁷

Obligations concerning the “liquidation of the mining installation” (closure and post-closure) include financing costs related to the liquidation of mining installations and facilities, post-closure monitoring for 20 years after closure, remedial actions, accounting for emissions in case of leakages as well as the costs of preventive and remedial actions related to damages, subject to legislation on environmental damages (transposition of Environmental Liability Directive) and compensation for damages, which were released after the closure of the storage site.²⁸

Financial security in the form of monetary funds is deposited at a separate account of the National Fund for Environmental Protection and Water Management. The bank guarantees, insurance guarantee or civil insurance of the operator should be designed in such a way that the respective funding can be used upon request of the concession authority (Environment Minister) in case the operator does not fulfil its obligations.²⁹ The amount of the financial security may be increased by the concession authority in case there is evidence of an increased risk related to the operation of the underground storage of CO₂.³⁰

According to Art. 28c GMLA, the funding from the financial security is to be transferred to the subjects entitled to receive such funding for the purposes listed in the provisions and upon an order of the concession authority (Environment Minister) issued following a request from these subjects. Subjects entitled to receive such funding include the operator, KAPS CO₂ (where it has taken over

²⁵ Included in Arts 28a-28d of GMLA 2011

²⁶ Art. 28a para 9 of GMLA 2011

²⁷ Art. 28a para 3 of GMLA 2011

²⁸ Art. 28a para 4 of GMLA 2011

²⁹ Art. 28a para 7 of GMLA 2011

³⁰ Art. 28b of GMLA 2011

the responsibility) and any subjects that were awarded, by a court verdict, damages related to the operation of a given CO₂ storage site (before or after closure).

The financial security is to be released, upon request of the operator, by the concession authority following its decision regarding transfer of responsibility to KAPS CO₂.³¹ From then on the respective activities KAPS CO₂ are to be financed from other sources, i.e. so-called “security means”.

Financial mechanism

The requirements of Art. 20 of the CCS Directive regarding the financial mechanism are to be implemented in Poland mostly through the institution of “security means” (“zabezpieczenie środków”). These are regulated in Arts 28e-28g GMLA. The legal scheme is similar to the legal scheme concerning financial security but some details are different.

As with the financial security scheme, the form, scope and the manner of “security means” are to be determined by the concession authority during the concession procedure in the form of a separate order which may be subject to appeal. “Security means” can take the same forms as the financial security, the only exception is that “security means” can take the shape of a guarantee fee as opposed to monetary funds. Thus, “security means” can consist of any or several of the following: a guarantee fee, bank guarantees, an insurance guarantee or civil insurance of the operator.³²

A “security means” in the form of a guarantee fee is deposited at a separate account of the National Fund for Environmental Protection and Water Management. The bank guarantees, insurance guarantee or civil insurance of the operator should be designed in such a way that the respective funding can be used upon request of the concession authority (Environment Minister) in case the operator does not fulfil its obligations.³³ The amount of the financial security may be increased by the concession authority in case there is evidence of an increased risk related to the operation of the underground storage of CO₂.³⁴ The financial security in the form of guarantee fee is not included into the bankruptcy estate.³⁵

According to Art.28g GMLA 2011 the funding from financial security is to be transferred to the subjects entitled to receive such funding for the purposes listed in Art.28g(2), upon an order of the concession authority (Environment Minister) following a request from these subjects. Those entitled to receive such funding are KAPS CO₂ (after the responsibility has been transferred to it) and any subjects that were awarded by a court damages relating to the operation of given CO₂ which have been detected after the transfer of responsibility.

³¹ Art. 28d of GMLA 2011

³² Art. 28e para 3 of GMLA 2011

³³ Art. 28e para 4 of GMLA 2011

³⁴ Art. 28f of GMLA 2011

³⁵ Art. 28g para 3 of GMLA 2011

IX. CCS readiness

Art. 33 of the CCS Directive is meant to be implemented in Poland predominantly by way of integrating a “CCS readiness” assessment into the EIA procedure. As previously mentioned, the CCS transposition package in Poland included respective changes to the EIA scheme. In addition to adding CCS activities to the list of activities subject to environmental assessment, the CCS Amendment Act also made the necessary changes to the abovementioned EIA Act of 2008. The CCS readiness assessment was made a mandatory component of the EIA Report for combustion plants with a rated electrical output of 300 megawatts or more. On that basis, CCS readiness will be confirmed in the respective decision on environmental conditions (the EIA decision). If at the stage, (the first stage in the decision-making procedure for development consent in Poland) it was not feasible to assess the CCS readiness, this would trigger the obligation to perform an EIA procedure again at the stage of building (construction) permit. These arrangements are rather general and open to different interpretations as to the legal nature of the obligations involved. They will probably soon be tested in court because the issue of CCS readiness has already been used by NGOs as an instrument to challenge the authorisation of new combustion plants in Poland.

A concrete illustration in this context is the case of the planned development of the Opole Power Plant whereby one of the main Polish power companies planned to develop two new units on site of the existing coal power plant. An EIA was carried out for this new project and was concluded by the Decision on Environmental Conditions (EIA decision). The EIA decision was issued in the first instance by the Regional Director for Environmental Protection (regionalny dyrektor ochrony środowiska, RDOŚ) on the 30 December 2010 (i.e. before the transposition deadline of the CCS Directive³⁶).

The first instance decision was appealed by three NGOs to the General Director for Environmental Protection (Generalny Dyrektor Ochrony Środowiska, GDOŚ). The General Director upheld the first instance decision by its decision of 16 August 2011 (i.e. issued after the transposition deadline of the CCS Directive). The second instance decision was then challenged by the NGOs before the administrative court. One of the arguments presented by the NGOs was that the EIA Report prepared by the developer within the EIA procedure failed to provide the analysis as required by Art. 9a of Directive 2001/80/EC (introduced by the CCS Directive).

The Regional Administrative Court in Warsaw (Wojewódzki Sąd Administracyjny, WSA) ruled in favour of the NGOs and annulled both decisions i.e. by RDOŚ and GDOŚ (verdict of 12 January 2012; IV SA/Wa 1757/11). The court justified its decision, among other things, on grounds of the violation of the requirements of the CCS Directive. It indicated that at the time when the second instance authority issued its decision, the deadline for transposition of the CCS Directive had already passed and thus the authority was obliged to consider the aspect of the assessment as required by Art. 9a of Directive 2001/80/EC. Although the court indicated that EU Directives require transposition into national law, it also stressed that the existing national provisions, such as those on the requirements for the EIA report, should be interpreted in line with the EU law, which in this case would mean that the EIA Report should encompass also the assessment required by Art. 9a of Directive 2001/80/EC. The court connected this obligation with the fact the planned

³⁶ The transposition deadline was set for 25 June 2011

power plant units should fulfil the requirements of BAT as defined by the IPPC Directive - and according to Polish law the EIA report should indicate whether the planned project subject to IPPC Directive would be able to fulfil best available technique (BAT) requirements. According to the court, the minimal requirements set by the EU law –such as those of Directive 2001/80/EC as amended– must be taken into account when assessing compliance with BAT.

This decision was then appealed by the developer (the energy company) to the Main Administrative Court (Naczelny Sąd Administracyjny, NSA). The Main Administrative Court annulled the verdict of the Regional Administrative Court by its verdict of 2 October 2012 (II OSK 1246/12). The second instance court indicated that bearing in mind the content and scope of the CCS Directive and in particular of Art. 9a of Directive 2001/80/EC it should be concluded that provisions of these Directives could not be applied by simply interpreting national provisions, as in this case the transposition into national law was absolutely necessary. The Main Administrative Court indicated also that at the stage of the EIA decision the potential compliance with BAT could not be assessed, as this could be only done at the stage of the IPPC permit.

X. Public participation and information

(i) Public involvement in the transposition process

Both the draft of the Principles for the draft law to transpose the CCS Directive and the actual draft law which resulted were subject to routine public consultations. But, in case of the draft Principles the consultations were conducted at the very early stage of the procedure (in November 2009) and have not been repeated despite the fact that a number of consecutive drafts have been prepared afterwards. Furthermore, while the draft Principles were publicly available and open to be commented by everyone for a period of 30 days, only selected stakeholders (mostly trade unions and representatives of business associations) were specifically invited to submit comments. Similar situation took place in relation to the actual draft law whereby the draft was specifically submitted for consultation only to trade unions and representatives of business associations and local authorities. The draft law was also available for comments to the general public (in March 2013) but their comments (in particular extensive comments by a coalition of 23 Polish NGOs interested in climate change – so called Climate Coalition) in the Statement of Reasons accompanying the draft law submitted to the Parliament were not acknowledged as being taken into account in the final draft (as opposed to comments by trade unions and representatives of business associations and local authorities).

One should note the fact that neither CCS technology as such nor the transposition of the CCS Directive has been subject to any wide public debate. In practice, except for the NGOs involved in climate change issues and local population in a couple of local communities potentially hosting CCS activities, the general public in Poland has not been really involved in the process. This to a large extent may be due to the relatively small interest of the mass media in the issue.

The only possibility to discuss the application of CCS technology was the public participation procedure, and the respective SEA process, related to the draft Polish Energy Policy until 2030.

According to the official report summarising the results of the consultations, most comments were critical of CCS because of its limited effectiveness as means of climate change policy and potential negative impact on the economic efficiency of the energy sector. Despite these views, at that time the Government decided to promote CCS in the Energy Policy as a promising technology to help combating the environmental impact of the energy sector.³⁷

(ii) Public involvement in permitting procedures

The Polish legislation transposing the CCS Directive envisages active public involvement in CCS activities only at a very early stage of the permitting procedure. As mentioned above, CCS-related activities (prospecting for and exploration of the underground CO₂ storage complex, underground storage of carbon dioxide and transportation of carbon dioxide, and also pipelines for the transport of CO₂ streams) are subject to Decisions on Environmental Conditions (EIA decisions). A mandatory part of the EIA procedure is public participation. The applicable rules are grouped into the “public participation procedure” which is procedurally modelled on Art.6 of the Aarhus Convention. This procedure is based on an “every person” principle but it grants certain special rights for environmental NGOs. The procedure works like a piece of Lego that can be built into various procedures and applies not only to concrete decisions under EIA and IPPC Directives and to the preparation of plans, programs, policies and strategies which require public participation under the Public Participation Directive, but also to a number of other procedures. The procedures indicate that the “authority shall ensure the possibility of public participation in the procedure” which means that the provisions of the “public participation procedure” apply to any given decision-making.

Under this procedure, public administration authorities responsible for issuing individual decision or for preparing a document (such as a plan or program or other strategic document) requiring public participation must notify the public about the commencement of the procedure, the availability of relevant information for inspection through the system of publicly available records, and about the possibility of submitting comments and recommendations. Any person, natural and legal, regardless of nationality, citizenship and domicile, has the right to submit comments or recommendations, and the authority is obliged to consider these comments and recommendations.

The authority must provide reasoning for its decisions or plans, and include information about public comments and recommendations and how they were used within the document or decision. Detailed information about these comments and final versions of documents as well as the decisions must be placed in a publicly accessible record, and the public has to be notified about it.

This “public participation procedure” is a mandatory part of any EIA process. Bearing in mind that, following cases such as *Crystal Palace/White City* (C-508/03) and *Barker* (C-290/03), Polish EIA law allows for the possibility of a repeated EIA procedure at the stage of construction (building) permit – in certain circumstances, in addition to EIA and related public participation at the stage of granting the EIA decision, there might be another public participation required in the

³⁷ Minister of Economy, “Z Wyników Konsultacji Społecznych Projektu Polityki Energetycznej Polski Do 2030 Roku”, 15 July 2009, Available at: <http://www.mg.gov.pl/NR/rdonlyres/5474D2C2-2306-42B0-B15A-7D3E4E61D1D8/55763/Raportzkonsultacji.pdf> (last visited on 4 March 2014)

permitting procedure at the stage of construction (building) permit. But there is no mandatory requirement for the public participation procedure to be conducted at the stage of granting a concession for CCS activities by the Environment Minister. At this stage only a limited scope of third parties (owners of the real property potentially affected) may participate and there are no special rights for environmental NGOs. In case of CO₂ capture installations the public participation procedure would be mandatory as part of the integrated permitting procedure under IPPC/IED Directive.

As already indicated, the first permitting decisions (EIA decision and a respective building consent) had already been granted for the capture installation integrated with the new-built 858MW unit in the PGE Elektrownia Bełchatów S.A. The application for a Decision on Environmental Conditions was submitted in October 2009 and the decision was issued by Kleszczów local authorities, after conducting an EIA with public participation, in December 2009. Furthermore, at the end of December 2009, project documentation for the building permit was submitted and at the end of January 2010 the Starost of Bełchatów issued the building permit for the demonstration Carbon Capture Plant installation fully integrated with the new-built 858 MW unit in PGE Elektrownia Bełchatów SA. The building permit took effect at the end of February 2010. The timing for these procedures is absolutely unusual for Poland, since usually the permitting procedure, even for a simple non-controversial project for which there is no appeal, take much longer. The short timescale can probably be explained by the fact that the capture installation itself was unlikely to be considered controversial, in particular by the local population in the area where the power plant was the main employer. The situation could have been different in local communities along the transport route and at the envisaged storage sites (about 140 km away) where neither local authorities nor the local population would be so economically dependent on the power company.

Knowing that gaining public acceptance of the CO₂ storage activities and the transportation of CO₂ would be of fundamental importance for the implementation and dissemination of CCS technology, the potential operator (the power company PGE) established its own “public participation group” and designed its own engagement strategy. This included the identification and characterization of stakeholders, the scope of planned activities and the development of appropriate tools to conduct these activities, based on proved experiences from similar campaigns dedicated to novel projects.³⁸ The Environment Ministry and Economy Ministry also planned to create a special group for public information and participation,³⁹ but this was just a very vague idea and was never implemented. In particular, there have never been any plans to introduce a legal basis for such specific activities in the transposing legislation. The group created by PGE was solely a private initiative of the operator and it was quite active in performing the task envisaged in their strategy but only up until the time when the company decided to cease its CCS activities.

(iii) Information to the public

The information regarding CO₂ storage sites will be available in the same way as the other information regarding mining activities, i.e. via the register of mining areas and closed

³⁸ <http://www.pgegiek.pl/index.php/ccs/ccs-demonstration-plant/>

³⁹ <http://www.pgegiek.pl/index.php/2010/08/27/projekt-ccs-konsultacje-spoleczne/>

underground CO₂ storage sites. This register will include concessions and other relevant documentation. As with the register of mining areas, the register will be run by the State Geological Service (which is performed by the National Geological Institute - the National Research Institute). The precise scope of the documents that will be available via this register will be determined by the Environment Minister by way of regulations (not yet issued).⁴⁰ As with the register of mining areas, the information in the register will be publicly available subject to provisions concerning access to environmental information,⁴¹ and reports from the inspections will be made available within two months of the inspection.⁴²

XI. Integration with existing environmental law generally

The transposition of the CCS Directive in Poland may be considered a model example of a successful attempt to integrate into the existing body of domestic law a new piece of legislation, stemming from Brussels and regulating a novel issue. In this respect it is a revival of the approach to the transposition of the environmental acquis that dominated in Poland at the turn of the century before completing the accession negotiations.

The original approach to transposition of the environmental acquis treated transposition as a contribution to developing domestic environmental legislation which was considered to be a comprehensive and internally coherent system rather than a piecemeal collection of randomly adopted separate laws. Thus transposition required careful introduction of the transposing provisions into the existing legal scheme or schemes, ideally by using or modifying the existing legal institutions and instruments.

The system was meant to be based on certain basic principles, definitions and legal institutions common to all elements of environmental protection which were codified in the Environmental Protection Law Act (EPLA) of 27 April 2001. Thus this piece of legislation included definitions of certain terms common to the entire body environmental protection law (such as “operator”, “installation”, “pollution” etc.) which were carefully designed in order to assist transposing various directives. It also included detailed regulations concerning legal institutions common to all elements of environmental protection, such as those dealing with so-called horizontal directives (such as public participation, EIA/SEA, access to environmental information) or issues related to environmental liability, economic instruments or administrative sanctions, where at the time of adopting the EPLA very little Community acquis existed.

The EPLA included also some sectoral issues (like noise and air protection), but most sectoral issues –due to their specificity and/or size of the respective legislation- were meant to be regulated in sector-specific laws. This, along with waste, water and nature protection (regulated respectively by the Waste Act, Water Law Act and Nature Protection Act), environmental protection was part of the geological and mining issues regulated traditionally by Geological and Mining Law Act (currently the GMLA of 2011).

⁴⁰ Arts. 152a (5) of GMLA 2011

⁴¹ Arts. 21 para 2 point 34 (a) and (b) of the EIA Act as amended.

⁴² Art. 21 para 2 point 34 (e) of the EIA Act as amended

The original approach to transposition, and consequently the idea of developing a comprehensive and internally coherent system, was de facto dropped with the transposition of two EU Directives related to specific types of waste (Directive 2000/53 (end of life vehicles) and Directive 2002/96 (waste electrical and electronic equipment)). It should be noted that this was the result of a series of random and haphazardous political decisions rather than a well-thought out shift in legislative policy. The result was the adoption of two new acts rather than including the transposing provisions into the comprehensive Waste Act of 2001. The same happened with the Environmental Liability Directive which was transposed by way of adopting a new act rather than by amending or supplementing the respective provisions of EPLA of 2001. This process of 'eroding' codification was manifestly completed with the adoption of the EIA Act of 3 October 2008 which repealed the respective provisions of EPLA 2001 (see above).

This recent approach to transposition, with new Directives addressing novel issues being transposed by way of adopting separate legal acts rather than attempting to include them into the existing legal schemes has resulted in the gradual process of compartmentalization of the environmental legislation in Poland. This has not contributed to the effectiveness of environmental protection in the country.

Bearing the above in mind, the decision to transpose the CCS Directive by way of amending the existing legal schemes, mostly the legal scheme of the GMLA, rather than by adopting a separate act on CCS, must be complimented. Developing new legislation would have been much easier and probably faster, but the strategy of adaptation by including CCS activities into a well-established and reasonably effective legal framework, assures effective implementation of the CCS Directive.

As already discussed, transposition of the CCS Directive involved not only amending the GMLA of 2011 but also some relatively minor changes and additions in other existing pieces of legislation. The most elaborated are the amendments to the Energy Law Act of 1997 in which a special chapter was added to address the issue of the transport of CO₂. The changes and additions to other existing laws (such as EPLA 2001, EIA Act 2008, the Management of Real Estate Act 1997 or the Prevention and Remedying of Environmental Damage Act 2007) were rather straightforward and mostly consisted of adding various CCS-related provisions to the existing legal provisions.

Most of the provisions of the CCS Directive have been found to be capable of being fitted into existing legal institutions, although in some instances certain minor modifications were needed. A relatively novel legal issue concerned the inclusion of the opinion of the European Commission in the CCS decision-making processes (permitting and transfer of responsibility) which, as clearly pointed out in the Statement of Reasons accompanying the draft law submitted to the Parliament, required some deviation from the general rules regarding the conduct of administrative procedures. This issue however was relatively easy to resolve, the more as to that a similar situation already had to be addressed under Art. 6 of the EU Habitats Directive where in case of priority species an opinion of the European Commission is needed before authorising a project or plan having significant negative effect on the Natura 2000 site.

The real novel legal issues which had not yet been encountered in existing Polish law were related to the transposition of the provisions of the CCS Directive concerning the transfer of responsibility. First of all a “competent authority” to which the responsibility would be transferred had to be designated. The tasks were new and it was decided that a new authority for the purpose would be needed. A new institution, KAPS CO₂, was created, but in practice, its functions were delegated to the National Geological Institute, the PIG. The idea of delegating the tasks of a newly created institution to an existing body is not new in Poland - a similar solution was found in 2004 for administering the Emissions Trading Scheme, when the functions of the newly created National Administration of the Emissions Trading Scheme (CASHUE - now called KOBIZE) was delegated to the Institute of Environmental Protection, a similar research institution to the Geological Institute, and also subordinated to the Environment Minister. However the role and functions of KAPS CO₂ in relation to CCS are quite different from those related to emission trading, therefore its creation involved a number of specific legal issues to be solved. The most difficult were the problems of transferring the ownership of geological information, the ownership of the real property and the ownership of the mining plant. The main issue was how to find a proper legal scheme to transfer the ownership without compensation in a way that would not abuse the relevant Constitutional principles concerning property rights. There were also important practical issues concerning access to documents, timing and form of transferring and assuming responsibility, details regarding the flow of funding etc. To resolve these problems, a number of legal devices have had to be applied - for example, it was found to be useful to differentiate between the “transfer of responsibility” (a routine consequence of the closure of the storage site) and the “takeover of responsibility” (a consequence of the withdrawal of the permit).

XII. Conclusions

The transposition of the CCS Directive in Poland has proved to be a lengthy process. The underlying cause of this does not seem to have been due to any obstruction or negligence on the part of those involved in this process nor from the strong opposition to the CCS technology. The public in general was not particularly interested in the issue and the opposition to CCS technology in some potentially affected local communities (such as those close to potential storage and transport routes) did not seem to be strong enough to prevent any CCS activities. Political opposition in Parliament, although quite critical towards the CCS, was not able to seriously hinder the transposition process. There seems to have been an originally very strong commitment of both the Government and the concerned power companies to deploy CCS technology in Poland and to transpose the CCS Directive as soon as possible. On the other hand, it was considered necessary to provide a clear, comprehensive and sufficient legal and financial framework to this effect.

One of the major debates holding the process of transposition related to the restriction of CCS in Poland to demonstration projects only. The Environment Ministry considered this was not possible under the CCS Directive while the Economy Ministry, supported by the Foreign Affairs Ministry, claimed that this would be in compliance with the Directive. Eventually, the Government decided to seek formally the opinion of the European Commission in this regard and the Commission

replied with a short statement which referred to Art. 4(1)⁴³ in conjunction with Art. 6(2)⁴⁴ of the CCS Directive as legal justification allowing some limitation in applying CCS.

However, the major cause for the delayed transposition was a genuine willingness of all involved governmental agencies and representatives of power companies to create a workable framework within which they would know precisely who is responsible for what, when and how. And there were many ideas how to achieve such a framework. A number of key policy issues had to be solved: how to address the legal and organizational issues related to the transfer of responsibility, how to assure proper funding and its distribution, and so on. The decision to transpose the CCS Directive by way of amending an existing legal scheme, rather than by adopting a separate act on CCS – while very reasonable – multiplied the difficulties and thus contributed to the delay in transposition. The law-drafters had additional technical legal problems in fitting in the requirements of the Directive and the respective policy decisions regarding the key legal, organizational and financial matters into the existing legal institutions created for slightly different purposes.

While these long and difficult debates on the policy and legal issues regarding the details of transposition were being resolved, the general approach towards CCS technology has changed. In light of cost-benefit analysis based on current data it became apparent that CCS technology would not provide an effective solution for the concerned Polish energy sector. This fact, combined with a revised business strategy of PGE, the most interested power company, resulted in its decision to quit the CCS demonstration project despite the costs already incurred. This in turn led to the policy decision of the Government to abandon further promotion of CCS technology in Poland as a major instrument of climate change policy. Thus paradoxically, despite finally seeing a comprehensive and potentially workable legal scheme for CCS developed in Poland, if neither the power companies nor the Government are interested in undertaking any activities, the law may well remain a dead letter.

⁴³ Art. 4(1) Member States shall retain the right to determine the areas from which storage sites may be selected pursuant to the requirements of this Directive. This includes the right of Member States not to allow for any storage in parts or in the whole of their territory

⁴⁴ Art. 6(2) Member States shall ensure that the procedures for the granting of storage permits are open to all entities possessing the necessary capacities and that the permits are granted on the basis of objective, published and transparent criteria.