


## Country Factsheet Poland (PL)

<p><i>Member State</i></p>	<p><b>Poland</b></p>	
<p><i>Recent achievements</i></p>	<ul style="list-style-type: none"> <li>– Waste was defined as one of five priority areas in the EU Operational Programme 'Infrastructure and Environment' for Poland (allocation of 25% of the budget), [ReTECH 2009];</li> <li>– The national WMP is already based on the waste hierarchy as priority order for the waste management system and sets out specific provisions for hazardous waste, municipal waste and residual waste [BiPRO 2007-2011];</li> <li>– The Polish Chief Inspectorate for Environmental Protection provides guidance on inspections and coordinates inspections at regional level giving instructions to the regional inspectorates [BiPRO 2007-2011];</li> <li>– Inspections are very well planned and performed. They are commonly focusing on big and high risk facilities, and comprise the checking of relevant permits and on-site operations as well as hazard assessment and organisation of waste chain inspections [BiPRO 2007-2011];</li> <li>– Poland is actively involved in the IMPEL network for information and experience exchange [BiPRO 2007-2011];</li> <li>– Two new initiatives in waste management have been established by the ministry and co-operating public institutions: A working group on waste management was created within Network Partnership "Environment for Development". It is financed from the OP Technical Assistance 2007-2013. Among participants there are representatives of environmental authorities from national to regional level and managing authorities for all of infrastructural OP within Common Reference Framework 2007-2013 [PL MoE 2012]. The Forum "Best practices in waste management" was organised by the National Fund for Environmental Protection and Water Management in 2011. It is open to representatives of authorities, entrepreneurs and NGOs [PL MoE 2012]; [BiPRO 2007-2011];</li> <li>– Pilot projects on waste incineration [BiPRO 2007-2011];</li> <li>– Realisation of national waste prevention campaigns including awareness raising on proper waste management (separate collection etc.), [BiPRO 2007-2011];</li> <li>– The charges levied for landfilling mixed municipal waste were raised, whilst lower rates were maintained for landfilling treated municipal waste, as a financial incentive to businesses. The amount of separately collected municipal waste, including biodegradable municipal waste, is steadily increasing (788,000 tonnes in 2009), [PL Landfill 2007-2009]; [PL MoE 2012];</li> <li>– The national strategy for reducing the amount of biodegradable waste landfilled was updated in 2010, [PL Landfill 2007-2009];</li> <li>– Closure of high number of incompliant landfills and re-equipment of landfills so that they comply with EU requirements [PL Landfill 2007-2009];             <ul style="list-style-type: none"> <li>- Changing of the law regarding responsibilities and a system of municipal waste management – act of 1 July 2011 on amendment of the act on keeping cleanliness and order in municipalities and other acts (Journal of Laws No. 152, item. 897, with later amendments)</li> </ul> </li> </ul>	

	entered into force on 1 <sup>st</sup> January 2012 [PL MoE 2012].
<i>Population</i>	– Total population in 2011: 38,200,037 [EUROSAT 2012c]
<i>Population density</i>	– inhabitants per km <sup>2</sup> : 122 per km <sup>2</sup> [EUROSTAT 2012c]; [CIA 2012]; – ~ 61 % of total population living in urban areas in 2010 [CIA 2012]
<i>Geographical particularities</i>	Poland is located in central Europe and includes a variety of landscapes, from northern lowlands, to southern uplands, culminating in the rocky mountain ranges of Karpaty and Sudety [EEA 2010b].  The largest cities of Poland are Warsaw (capital, 1.71 million inh., 2009) and Kraków (756,000 inh., 2009), [CIA 2012]. Other major agglomerations comprise Łódź (ca. 750,000 inh.), Wrocław (ca. 630,000 inh.), Poznań (ca. 560,000 inh.) and Gdańsk, Szczecin and Bydgoszcz with each around 400,000 inh. [ReTECH 2009].
<b>Features of the national waste management system</b>	
<i>Competent authorities</i>	<p><b>Waste legislation and implementation, WMPs/WPPs:</b></p> <ul style="list-style-type: none"> <li>– Minister of the Environment (MoE, <i>Minister Środowiska</i>), Department of Waste Management [Eionet 2009]; <i>inter alia</i> responsibility for preparation of a national waste management plan with a waste prevention programme [PL MoE 2012].</li> <li>– Poland is divided into 16 voivodships. “Administrative authority at voivodship level is shared between a government-appointed governor called a voivode (<i>governmental administration</i>), and an elected assembly (sejmik), with an executive chosen by that assembly (<i>self-governmental administration</i>). The leader of that executive is called the <i>marszałek województwa</i> (voivodship marshal) [PL MoE 2012].</li> <li>– At the voivodship level most of responsibilities in the field of waste management belong to self-governmental administration. Voivodship marshals are responsible <i>inter alia</i> for preparation voivodship waste management plans with waste prevention programmes [PL MoE 2012].</li> <li>– Voivodships are further divided into powiats (counties) and gminas (communes or municipalities)<sup>1</sup>.</li> </ul> <p><b>Inspections and enforcement</b></p> <ul style="list-style-type: none"> <li>– Chief Inspectorate for Environmental Protection (<i>Główny Inspektorat Ochrony Środowiska</i>);</li> <li>– Voivodship Inspectorates for Environmental Protection (<i>Wojewódzkie Inspektoraty Ochrony Środowiska</i>);</li> <li>– General responsibility for enforcement of municipal waste management is in responsibility of municipalities [ReTECH 2009].</li> </ul>
<i>Informal sector</i>	Involvement of the informal sector is insignificant and mainly concerns individual trade of paper and cardboard, metal scrap etc. Very occasionally there is a collection and sorting activity of the marginalized social groups at landfills [ReTECH 2009].

<sup>1</sup> [http://en.wikipedia.org/wiki/Voivodships\\_of\\_Poland](http://en.wikipedia.org/wiki/Voivodships_of_Poland), accessed on 16 May 2012

<p><i>State of public awareness</i></p>	<p>Environmental awareness is growing. The waste behaviour is characterized by the unwillingness to fully participate in the sorting of waste streams due to lack of financial incentives and convenience [ReTECH 2009].</p> <p>Awareness raising and information of the general public needs to be improved and the activities in this field are on high priority of the Polish environmental policy. In 2009/2010 the MoE launched a nationwide public educational and information campaign that aimed at preventing waste and encouraging the proper treatment of waste, including packaging waste [BiPRO 2007-2011].</p>
<p><i>Occurrence of structural dumping, fly tipping and littering</i></p>	<p>Illegal burning at households and illegal dumping is still occurring especially where collection of municipal waste is not available or not provided on the required frequency [ReTECH 2009].</p>
<p><b>Legislation</b></p>	
<p><i>National</i></p>	<ul style="list-style-type: none"> <li>– <b>WFD 2008/98/EC:</b> The current waste management legislation in place is the Act of 27 April 2001 on waste (Journal of Laws of 2010, No. 185, item. 1243, with later amendments). This Act will be replaced by a new one in order to incorporate some elements of the new WFD, which so far have not been transposed by amendments of the Act of 27 April 2001 on waste. The transposition deadline of 12 December 2010 has not been met, but the final draft act was adopted by the Council of Ministers in April 2012 and submitted to the Parliament in May 2012 [PL MoE 2012]. The final draft was notified to the EC in April 2012. No comments were submitted from the EC. Polish legislation is intended to include all relevant requirements of the new WFD [BiPRO 2007-2011]. The transposition of the WFD into national law was not concluded by the end of April 2012 and Poland will most probably be fined for this delay;<sup>2</sup> The new act on waste was adopted by the Parliament on 14<sup>th</sup> December 2012, signed by the President on 28<sup>th</sup> December 2012 and published on 8<sup>th</sup> January 2013. It will enter into force on 23<sup>rd</sup> January 2013.</li> <li>– <b>Landfill Directive 1999/31/EC</b> and <b>Landfill Decision 2003/33/EC</b> are transposed by the Act of 27 April 2001 on Waste, a full list of legal pieces transposing the requirements of the Landfill Directive is available at Eur-lex<sup>3</sup>. Given the pre-accession level of landfilling, Poland had to reach the first reduction target for bio-degradable waste set by the Landfill Directive 1999/31/EC in 2010;</li> <li>– <b>Incineration Directive 2000/76/EC</b> is transposed <i>inter alia</i> by the Act of 27 April 2001 on Waste and Regulation of the Minister of Economy of 21 March 2002 on the requirements for the waste thermal treatment process (Journal of Laws No. 37, item 339, with later amendments), a full list of legal pieces transposing the requirements of the Incineration Directive is available at Eur-lex;</li> <li>– <b>Packaging Directive 94/62/EC:</b> The <i>Act of 11 May 2001 on the Packaging and Packaging Waste (Journal of Laws No. 63, Item 638, with later amendments)</i> sets forth the requirements to be met by packaging with regard to environmental protection principles, as well as the methods for conduct of packaging and packaging waste. The Act of 11 May 2001 on economic operators' obligations in the scope of managing certain types of waste and on the product charges (Journal of Laws of 2007 No. 90, item 607, with later amendments) sets recovery and recycling targets [PL MoE 2012]. A new draft of the act on packaging and packaging waste management was adopted by the Council of Ministers and submitted to the Parliament in October 2012.</li> </ul> <p>In order to fulfill the requirements in practice and to achieve the EU targets, considerable efforts need to be made which comprise in particular the collection coverage, separate collection, diversion of biodegradable waste from landfills, compliance with technical standards (especially as regards the Landfill Directive) and recovery/recycling capacity [EEA 2010]; [ReTECH 2009]; [BiPRO 2007-2011].</p>

<sup>2</sup> <http://www.europeanvoice.com/article/2012/april/eu-to-fine-four-countries-for-waste-law-delays/74234.aspx>, accessed on 29 May 2012

<sup>3</sup> [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:71999L0031:EN:NOT#FIELD\\_PL](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:71999L0031:EN:NOT#FIELD_PL), accessed on 29 May 2012

	<p><b>List of basic Polish acts in the field of waste management</b></p> <ul style="list-style-type: none"> <li>– ustawa z dnia 27 kwietnia 2001 r. - Prawo ochrony środowiska (Dz. U. z 2008 r. Nr 25, poz. 150, z późn. zm.), Act of 27<sup>th</sup> April 2001 - Environmental Protection Law (J. of L. of 2008 No. 25, item 150, with later amendments)</li> <li>– ustawa z dnia 27 kwietnia 2001 r. o odpadach (Dz. U. z 2010 r. Nr 185, poz. 1243, z późn. zm.), Act of 27<sup>th</sup> April 2001 on waste (J. of L. of 2010 No. 185, item 1243, with later amendments)</li> <li>– ustawa z dnia 27 lipca 2001 r. o wprowadzeniu ustawy - Prawo ochrony środowiska, ustawy o odpadach oraz o zmianie niektórych ustaw (Dz. U. Nr 100, poz. 1085, z późn. zm.), Act of 27<sup>th</sup> July 2001 on the introduction of the act on the Environmental Protection Law, the Act on Waste and amending certain Acts (J. of L. No. 100, item 1085, with later amendments)</li> <li>– ustawa z dnia 13 września 1996 r. o utrzymaniu czystości i porządku w gminach (Dz. U. z 2012 r. poz. 391), Act of 13<sup>th</sup> September 1996 on keeping cleanliness and order in municipalities (J. of L. of 2012 item 391),</li> <li>– ustawa z dnia 11 maja 2001 r. o opakowaniach i odpadach opakowaniowych (Dz. U. Nr 63, poz. 638, z późn. zm.), Act of 11<sup>th</sup> May 2001 on packaging and packaging waste (J. of L. No. 63, item 638, with later amendments)</li> <li>– ustawa z dnia 11 maja 2001 r. o obowiązkach przedsiębiorców w zakresie gospodarowania niektórymi odpadami oraz o opłacie produktowej (Dz. U. z 2007 r. Nr 90, poz. 607, z późn. zm.), Act of 11<sup>th</sup> May 2001 on economic operators' obligations in the scope of managing certain types of waste and on the product charges (J. of L. of 2007 No. 90, item 607, with later amendments)</li> <li>– ustawa z dnia 20 stycznia 2005 r. o recyklingu pojazdów wycofanych z eksploatacji (Dz. U. Nr 25, poz. 202, z późn. zm.), Act of 20<sup>th</sup> January 2005 on recycling of end-of life vehicles (J. of L. No. 25, item 202, with later amendments)</li> <li>– ustawa z dnia 29 lipca 2005 r. o zużytych sprzęcie elektrycznym i elektronicznym (Dz. U. Nr 180, poz. 1495, z późn. zm.), Act of 29<sup>th</sup> July 2005 on waste electric and electronic equipment (J. of L. No 180, item 1495, with later amendments)</li> <li>– ustawa z dnia 29 czerwca 2007 r. o międzynarodowym przemieszczaniu odpadów (Dz. U. Nr 124, poz. 859, z późn. zm.), Act of 29<sup>th</sup> June 2007 on international movement of waste (J. of L. No 124, item 859, with later amendments)</li> <li>– ustawa 10 lipca 2008 r. o odpadach wydobywczych (Dz. U. Nr 138, poz. 865, z późn. zm.), Act of 10<sup>th</sup> of July 2008 on mining waste (J. of L. No. 138, item 865, with later amendments)</li> <li>– ustawa z dnia 24 kwietnia 2009 r. o bateriach i akumulatorach (Dz. U. Nr 79, poz. 666, z późn. zm.), Act of 24<sup>th</sup> of April 2009 on batteries and accumulators (J. of L. No. 79, item 666, with later amendments)</li> </ul> <p>and given on their basis executive regulations.</p>
<i>Regional</i>	According to the above-mentioned new law (which entered into force on 1 <sup>st</sup> January 2012) resolutions of Sejmik on realisation of voivodship waste management plans are a local law [PL MoE 2012]. They were adopted on the same days as voivodship waste management plans (see below: WMP and WPP – regional).
<b>WMP and WPP</b>	
<i>National</i>	<p>The National Waste Management Plan 2014 (<i>Krajowy plan gospodarki odpadami 2014</i>)</p> <p>Polish National Waste Management Plan:</p> <p><a href="http://monitorpolski.gov.pl/MP/2010/s/101/1183">http://monitorpolski.gov.pl/MP/2010/s/101/1183</a> (in Polish)</p>

	<p>Time period covered: 2011-2014, outlook 2015-2022</p> <p>The National Waste Management Plan 2014 includes a Waste Prevention Programme (WPP). The programme is not a separate chapter of the national plan but all chapters contain elements (measures) dedicated to waste prevention [PL MoE 2012]. According to the law it will be updated not later than in 2016.</p>
Regional	<p>All Voivodship regions have their own waste management plans:</p> <ol style="list-style-type: none"> <li>1. Lower Silesian (<i>dolnośląskie</i>)  <u>Title:</u> Wojewódzki Plan Gospodarki Odpadami dla Województwa Dolnośląskiego 2012  <u>Link:</u> <a href="http://bip.umwd.dolnyslask.pl/dokument.php?idok=1645&amp;idmp=22&amp;r=r;">http://bip.umwd.dolnyslask.pl/dokument.php?idok=1645&amp;idmp=22&amp;r=r;</a>  <a href="http://www.umwd.dolnyslask.pl">http://www.umwd.dolnyslask.pl</a>  <u>Time scope:</u> 2012-2017, outlook to 2023  <u>Adoption:</u> 27 June 2012</li> <li>2. Kuyavian-Pomeranian (<i>kujawsko-pomorskie</i>)  <u>Title:</u> Plan gospodarki odpadami województwa kujawsko- pomorskiego na lata 2012-2017 z perspektywą na lata 2018-2023  <u>Link:</u> <a href="http://www.kujawsko-pomorskie.pl/pliki/srodowisko/20121001_plan/PGO_uchwalony_24_09_2012.pdf">http://www.kujawsko-pomorskie.pl/pliki/srodowisko/20121001_plan/PGO_uchwalony_24_09_2012.pdf</a>  <u>Time scope:</u> 2012-2017, outlook 2018-2023  <u>Adoption:</u> 24 September 2012</li> <li>3. Lubelskie (<i>lubelskie</i>)  <u>Title:</u> Plan gospodarki odpadami dla województwa lubelskiego 2017  <u>Link:</u> <a href="http://www.um.bip.lublin.pl/upload/pliki/WPGO_18_lipca_z_nr_uchwaly.pdf">http://www.um.bip.lublin.pl/upload/pliki/WPGO_18_lipca_z_nr_uchwaly.pdf</a>  <u>Time scope:</u> 2012-2017, outlook 2018-2023  <u>Adoption:</u> 30 July 2012</li> <li>4. Lubuskie (<i>lubuskie</i>)  <u>Title:</u> Plan gospodarki odpadami dla województwa lubuskiego na lata 2012-2017 z perspektywą do 2020 roku (Waste Management Plan Lubuskie for the years 2012-2017 with a view to 2020)  <u>Link:</u> <a href="http://bip.lubuskie.pl/84/98/Plan_Gospodarki_Opadami_dla_Wojewodztwa_Lubuskiego/">http://bip.lubuskie.pl/84/98/Plan_Gospodarki_Opadami_dla_Wojewodztwa_Lubuskiego/;</a>  <a href="http://lubuskie.pl/nowe-menu/menu-strony/srodowisko-2/plan-gospodarki-odpadami-dla-wojewodztwa-lubuskiego-na-lata-2012-2017-z-perspektywa-do-2020r/">http://lubuskie.pl/nowe-menu/menu-strony/srodowisko-2/plan-gospodarki-odpadami-dla-wojewodztwa-lubuskiego-na-lata-2012-2017-z-perspektywa-do-2020r/</a>  <u>Time scope:</u> 2012-2017, outlook to 2020  <u>Adoption:</u> 10 September 2012</li> <li>5. Łódź (<i>łódzkie</i>)  <u>Title:</u> Plan gospodarki odpadami województwa łódzkiego 2012  <u>Link:</u> <a href="http://www.lodzkie.pl/wps/wcm/connect/BIP/BIP/UrządMarszalkowski/Programy/ProgramyOchronaSrodowiska/">http://www.lodzkie.pl/wps/wcm/connect/BIP/BIP/UrządMarszalkowski/Programy/ProgramyOchronaSrodowiska/</a>  <u>Time scope:</u> 2012-2017, outlook 2018-2023  <u>Adoption:</u> 21 June 2012</li> <li>6. Lesser Poland (<i>małopolskie</i>)  <u>Title:</u> Plan gospodarki odpadami województwa małopolskiego  <u>Link:</u> <a href="http://www.malopolskie.pl/pgowm">www.malopolskie.pl/pgowm</a>; <a href="http://www.malopolskie.pl/Srodowisko/Odpady">www.malopolskie.pl/Srodowisko/Odpady</a>  <u>Time scope:</u> 2012-2017, outlook to 2020  <u>Adoption:</u> 2 July 2012</li> <li>7. Masovian (<i>mazowieckie</i>)  <u>Title:</u> Wojewódzki Plan Gospodarki Odpadami na lata 2012-2017 z uwzględnieniem lat 2018-2023  <u>Link:</u> <a href="http://www.mazovia.pl/komunikaty/art,1642,sejmik-wojewodztwa-mazowieckiego-uchwalil-plan-gospodarki-odpadami-dla-mazowsza-na-lata-2012-2017-z-uwzględnieniem-lat-2018-2023.html">http://www.mazovia.pl/komunikaty/art,1642,sejmik-wojewodztwa-mazowieckiego-uchwalil-plan-gospodarki-odpadami-dla-mazowsza-na-lata-2012-2017-z-uwzględnieniem-lat-2018-2023.html</a>  <u>Time scope:</u> 2012-2017, outlook 2018-2023  <u>Adoption:</u> 22 October 2012</li> <li>8. Opolskie (<i>opolskie</i>)  <u>Title:</u> Plan gospodarki odpadami dla województwa opolskiego na lata 2012-2017  <u>Link:</u> <a href="http://opolskie.pl/serwis/index.php?id=10767">http://opolskie.pl/serwis/index.php?id=10767</a> (to be updated)</li> </ol>

	<p><u>Time scope</u>: 2012-2017, outlook to 2013 <u>Adoption</u>: 28 August 2012</p> <p>9. Podkarpackie (<i>podkarpackie</i>) <u>Title</u>: Plan gospodarki odpadami dla województwa podkarpackiego <u>Link</u>: <a href="http://www.wrota.podkarpackie.pl/pl/bip/wojewodztwo-podkarpackie/wykaz_dok/gospodarka_odpadami/plan_gospodarki_odpadami">http://www.wrota.podkarpackie.pl/pl/bip/wojewodztwo-podkarpackie/wykaz_dok/gospodarka_odpadami/plan_gospodarki_odpadami</a> <u>Time scope</u>: 2012-2017, outlook 2018-2023 <u>Adoption</u>: 27 August 2012</p> <p>10. Podlaskie (<i>podlaskie</i>) <u>Title</u>: Plan gospodarki odpadowej województwa podlaskiego na lata 2012-2017 <u>Link</u>: <a href="http://www.wrotapodlasia.pl/pl/ochrona_srodowiska/programy_plany/Aktualizacja_Planu_Gospodarki_Odpadami_dla_Wojewodztwa_Podlaskiego.htm">http://www.wrotapodlasia.pl/pl/ochrona_srodowiska/programy_plany/Aktualizacja_Planu_Gospodarki_Odpadami_dla_Wojewodztwa_Podlaskiego.htm</a>; <a href="http://www.wrotapodlasia.pl/NR/rdonlyres/11ED0714-7C04-4748-B07B-A4C56566454F/0/WPGO_20122017.pdf">http://www.wrotapodlasia.pl/NR/rdonlyres/11ED0714-7C04-4748-B07B-A4C56566454F/0/WPGO_20122017.pdf</a> <u>Time scope</u>: 2012-2017, outlook - <u>Adoption</u>: 21 June 2012</p> <p>11. Pomoranie (<i>pomorskie</i>) <u>Title</u>: Plan gospodarki odpadami dla województwa pomorskiego 2018 <u>Link</u>: <a href="http://www.urzad.pomorskie.eu/pl/dokumenty_strategiczne/program_ochrony_srodowiska">http://www.urzad.pomorskie.eu/pl/dokumenty_strategiczne/program_ochrony_srodowiska</a> <u>Time scope</u>: 2012-2018, outlook to 2024 <u>Adoption</u>: 25 June 2012</p> <p>12. Śląskie (<i>śląskie</i>) <u>Title</u>: Plan gospodarki odpadami dla województwa śląskiego 2014 <u>Link</u>: <a href="http://bip.slaskie.pl/index.php?grupa=40&amp;id=74&amp;id_menu=54">http://bip.slaskie.pl/index.php?grupa=40&amp;id=74&amp;id_menu=54</a> <u>Time scope</u>: 2012-2022 <u>Adoption</u>: 24 August 2012</p> <p>13. Świętokrzyskie (<i>świętokrzyskie</i>) <u>Title</u>: Plan Gospodarki Odpadami dla Województwa Świętokrzyskiego 2012-2018 <u>Link</u>: <a href="http://www.sejmik.kielce.pl/plan-gospodarki-odpadami-dla-wojewodztwa-swietokrzyskiego-2012--2018---uchwalony-32403.html">http://www.sejmik.kielce.pl/plan-gospodarki-odpadami-dla-wojewodztwa-swietokrzyskiego-2012--2018---uchwalony-32403.html</a> <u>Time scope</u>: 2012-2018, outlook to 2023 <u>Adoption</u>: 28 June 2012</p> <p>14. Warmian-Masurian (<i>warmińsko-mazurskie</i>) <u>Title</u>: Plan gospodarki odpadami dla województwa warmińsko-mazurskiego na lata 2011-2016 <u>Link</u>: <a href="http://wrota.warmia.mazury.pl/Ochrona-srodowiska/Dokumanty-strategiczne/">http://wrota.warmia.mazury.pl/Ochrona-srodowiska/Dokumanty-strategiczne/</a> <u>Time scope</u>: 2011-2016, outlook 2017-2022 <u>Adoption</u>: 19 June 2012</p> <p>15. Greater Poland (<i>wielkopolskie</i>) <u>Title</u>: Plan gospodarki odpadami dla województwa wielkopolskiego na lata 2012-2017 <u>Link</u>: <a href="http://www.bip.umww.pl/portal?id=1721286">http://www.bip.umww.pl/portal?id=1721286</a> <u>Time scope</u>: 2012-2017, outlook 2018-2023 <u>Adoption</u>: 27 August 2012</p> <p>16. West Pomeranian (<i>zachodniopomorskie</i>) <u>Title</u>: Plan gospodarki odpadami dla Województwa Zachodniopomorskiego na lata 2012-2017 z uwzględnieniem perspektywy na lata 2018-2023 <u>Link</u>: <a href="https://bip.wzp.pl/attachments/33986_WPGO%20czerwiec%202012-za%C5%82%C4%85cznik%20do%20uchwa%C5%82y%20sejmiku.pdf">https://bip.wzp.pl/attachments/33986_WPGO%20czerwiec%202012-za%C5%82%C4%85cznik%20do%20uchwa%C5%82y%20sejmiku.pdf</a> <u>Time scope</u>: 2012-2017, outlook 2018-2023 <u>Adoption</u>: 29 June 2012</p>
<b>Instruments applied in the field of municipal waste and packaging waste</b>	
<i>Legal instruments</i>	<p><b>Landfill restrictions</b></p> <p>– 1 January 2011 introduction of a landfill ban for combustible waste collected selectively [PL MoE</p>

	<p>2012];</p> <p><b>Producer responsibility scheme</b> for packaging waste (Producer fee scheme), [EC 2012]</p> <ul style="list-style-type: none"> <li>– Introduction in 2002;</li> <li>– One of the scheme is led by the accredited operator Rekopol Recovery Organisation S.A. and implemented by the packaging users and producers. There are over 30 recovery organizations in Poland.</li> <li>– Entrepreneur obligations is based on three Acts: the Act of 27 April 2001 on waste, the Act of 11 May 2011 on Packaging and Packaging Waste - and the Act of 11 May 2001 on economic operators' obligations in the scope of managing certain types of waste and on the product charges. These acts transposed the EC Directive 94/62/EC into national law [PL MoE 2012];</li> <li>– The scheme has a national coverage and it targets all packaging operators (packaging manufacturers as well as packers and fillers);</li> <li>– The scheme involves local authorities in order to support the development of a selective collection system in municipalities.</li> </ul> <p><b>Recovery and recycling targets for packaging waste</b></p> <ul style="list-style-type: none"> <li>– Targets were introduced in January 2002.</li> </ul>
<p><i>Economic and fiscal instruments</i></p>	<p><b>Landfill fee:</b></p> <ul style="list-style-type: none"> <li>– First elements of a landfill fee system were introduced in the 70-ties (of the previous century) – for waste from mining industry. The system was expanded over years and in 2002 the last group of waste, i.e. municipal waste, was included into the system [PL MoE 2012]. Fee introduced in 2002, with a current level for residual municipal waste of 25€/t in 2011 [EC 2012]; [ETC/SCP 2012];</li> <li>– Fee development (1 Euro is ca. 4 zł), [PL MoE 2012]: <ul style="list-style-type: none"> <li>– 2002 – 13.80 zł</li> <li>– 2003 (1.01) – 14.42 zł</li> <li>– 2003 (1.04) – 14.75 zł</li> <li>– 2004 – 14.75 zł (94.2% MSW landfilled)</li> <li>– 2005 – 14.87 zł</li> <li>– 2006 – 15.39 zł (91.0% MSW landfilled)</li> <li>– 2007 – 15.71 zł</li> <li>– 2008 – 75.00 zł (86.6% MSW landfilled)</li> <li>– 2009 – 100.00 zł (78.2% MSW landfilled)</li> <li>– 2010 – 104.20 zł (73.4% MSW landfilled)</li> <li>– 2011 – 107.85 zł</li> <li>– 2012 – 110.65 zł</li> </ul> </li> <li>– Landfill fee is submitted to national (14 %) and voivodship (26 %) funds of environmental protection and water management and poviats (10 %) and municipal (50%) budgets. Poviats and municipal funds for environmental protection and waste management were liquidated on 1st January 2010 but those revenues can be used only for investments in the field of environmental protection and water management [PL MoE 2012];</li> <li>– Revenues are used exclusively for investments in the field of environmental protection and water management [PL MoE 2012];</li> <li>– Typical charges (tax + gate fee) for landfilling municipal waste range from 115 (28.13€) to 380 zł (92.94€), but mostly being about 200 zł (48.92€) [PL MoE 2012];</li> </ul> <p><b>Product charges (fees):</b> A system of product charges (fees), which apply if a business fails to achieve</p>

the required recovery and recycling rates for packaging waste, has been introduced. These charges are calculated from the difference between the required recovery or recycling rate and the rate actually achieved. A penalty for failing to fulfil statutory obligations is imposed by Polish legislation in this field [EC 2011f].

- Packaging any type of products for the purpose of holding, protecting, handling, delivering or possibly presenting all types of products (from materials to end goods);
- Introduction of product fees in 2002 [PL MoE 2012];
- Current level of fees (the regulation of the Minister of the Environment of 29 December 2010 on detailed rates of product fees (Journal of Laws of No. 259, item 1774)), depending on packaging material, for example [PL MoE 2012]:
  - Plastic packaging: 2.73 zł per kg
  - Aluminium packaging: 1.37 zł per kg
  - Paper: 0.65 zł per kg
  - Glass: 0.26 zł per kg
  - Wood or natural textiles: 0,33 zł per kg
  - Steel packaging: 0.82 zł per kg

**Incineration fee** [EC 2012]: None as there is only 1 plant (with the capacity of about 40 kt/y) established [PL MoE 2012].

**PAYT scheme:** PAYT schemes are implemented regionally; some waste collection companies have established PAYT systems [PL MoE 2012].

#### **Producer responsibility scheme**

- For packaging waste (Producer fee scheme), Producer-led, Rekopol Recovery Organisation S.A. , maximum average fee (latest available data) per tonne of paper 150 €, glass 40 €, aluminum 300 €, steel (no information), plastic 600 €, wood 80 € [EC 2012];
- Packaging, Green Dot scheme/Packaging waste recycling obligation;
- Other recovery organizations.

#### **Deposit refund systems** [EC 2012]:

- Deposit-refund system for glass and plastic bottles.

#### **Subsidies for secondary products/taxation of quarry products:**

- In Poland a reduced rate of taxation exists for plastic products made from recycled plastic packaging waste [EC 2012c];
- All technologies used in the generation of RES-E are promoted through price regulation [EC 2012];
- The previously operating EcoFund terminated its activities in November 2010 (<http://www.ekofundusz.org.pl/>). Its priorities of waste management were as follows:
  - Organization of comprehensive systems of the collection, recycling, and management of municipal wastes to serve areas with a population from 50,000 to 250,000 people;
  - Methods of the processing of biodegradable wastes generated by public utility facilities;
  - Safe disposal of hazardous waste;
  - Construction of systems for the recycling of municipal and hazardous waste;
  - Modernization of industrial technologies to eliminate the generation of hazardous waste (promotion of “clean technologies”);



	<p>6 countries: United States, France, Switzerland, Italy, Sweden and Norway agreed to convert 573 M USD of the debt into contribution to EcoFund. During 18 years the fund spent almost 500 M € to finance 1,400 investment projects (93 project in waste management of total value 200 M € including 62 M € fund contribution), [EC 2012].</p> <p><b>“Copper tax”</b> – a tax on extraction of copper and silver was introduced on 18 April 2012 (Act of 3 March 2012 on tax on extraction of same minerals (Journal of Laws of 2012, item 362)) [PL MoE 2012].</p>
<p><i>Administrative instruments</i></p>	<ul style="list-style-type: none"> <li>– Cooperation agreements between municipalities (e.g. via intermunicipal associations) is laid down in Act of 8th March 1990 on municipal self-government (Journal of Laws of 2001, No. 142, item 1591, with later amendments) [PL MoE 2012];</li> <li>– Organizations functioning as service provider for the fulfillment of certain obligations (e.g. recovery organizations for the fulfillment of obligations for producers and traders of packaging and packaging waste management, laid down in the Act of 11 May on economic operators’ obligations in the scope of managing certain types of waste and on the product charges (Journal of Laws of 2007, No. 90, item 607, with later amendments) [PL MoE 2012]</li> <li>– The working group on waste management within Network Partnership: “Environment for Development” (<a href="http://www.gdos.gov.pl/ProjectCategories/viewProject/80/1/0/Europejska_Siec_ENEA_MA">http://www.gdos.gov.pl/ProjectCategories/viewProject/80/1/0/Europejska_Siec_ENEA_MA</a>) and the Forum "Best practices in waste management" (<a href="http://odpady.nfosigw.gov.pl/">http://odpady.nfosigw.gov.pl/</a>) were mentioned before. Moreover there is a working group on monitoring of realization of national waste management plan [PL MoE 2012]. The Chief Inspectorate for Environmental Protection bundles responsibilities for enforcing waste legislation and coordinates inspections at voivodship level giving instructions to the voivodship inspectorates about the setting of inspection plans; providing general guidance for realizing inspections; providing particular guidance on the priority inspections issues. For this purpose an additional specific guidance was issued focusing on 1) inspection of landfills and 2) inspection of glass packaging waste;</li> <li>– There is a special web-site for communication with municipalities which can <i>inter alia</i> ask questions to experts regarding an introduction of a new municipal waste management system (<a href="http://www.mos.gov.pl/kategoria/4424_utzymanie_czystosci_i_porzadku_w_gminach/">http://www.mos.gov.pl/kategoria/4424_utzymanie_czystosci_i_porzadku_w_gminach/</a>) [PL MoE 2012].</li> </ul>
<p><i>Informative instruments</i></p>	<ul style="list-style-type: none"> <li>– The campaign “Don’t litter your conscience” (<a href="http://www.grzechyekologiczne.pl">www.grzechyekologiczne.pl</a>) was carried out by the MoE, and co-financed by the European Regional Development Fund with total budget 1,750,000 €. The campaign took second place in the competition for the most interesting public campaign in the area of environment protection organized by the European Environmental Communication Network (Green Spider Network), [BiPRO 2007-2011];</li> <li>– According to the national law, retailers and wholesalers are obliged to take back reusable packaging containing products which are included in their product ranges. In addition, vendors of beverages in one-way (disposable) packaging are obliged to include in their product ranges similar products that are available in reusable packaging [EC 2012c];</li> <li>– Eco shopping guide/information: One of examples: <a href="http://www.ekozakupy.net/">http://www.ekozakupy.net/</a> [PL MoE 2012];</li> <li>– Information campaigns addressing certain target groups: One of examples: <a href="http://www.kampaniespoleczne.pl/kampanie,1117,eko_grzech">http://www.kampaniespoleczne.pl/kampanie,1117,eko_grzech</a> [PL MoE 2012];</li> <li>– Guidance for MBT facilities: One of examples: MBT - <a href="http://www.mos.gov.pl/artukul/2538_mechaniczno_biologiczne_przetwarzanie_odpadow/9101_wytyczne_dotyczace_wymagan_dla_procesow_kompostowania_fermentacji_i_mechaniczno_biologicznego_przetwarzania_odpadow_wedlug stanu_prawnego_na_dzien_15_grudnia_2008_r.htm">http://www.mos.gov.pl/artukul/2538_mechaniczno_biologiczne_przetwarzanie_odpadow/9101_wytyczne_dotyczace_wymagan_dla_procesow_kompostowania_fermentacji_i_mechaniczno_biologicznego_przetwarzania_odpadow_wedlug stanu_prawnego_na_dzien_15_grudnia_2008_r.htm</a> [PL MoE 2012];</li> </ul>

	<ul style="list-style-type: none"> <li>– Capacity building: One of examples: <a href="http://www.mos.gov.pl/kategoria/4229_poradniki/">http://www.mos.gov.pl/kategoria/4229_poradniki/</a>; regular seminars for voivodship administration organised by the Ministry of the Environment [PL MoE 2012];</li> <li>– Awarding: One of the examples: <a href="http://www.liderpolskiejekologii.pl/?lang=1&amp;menu=1&amp;menu_select=3&amp;sess_id=jdrargxxqtznuajmstns1bzxxghlpyuy">http://www.liderpolskiejekologii.pl/?lang=1&amp;menu=1&amp;menu_select=3&amp;sess_id=jdrargxxqtznuajmstns1bzxxghlpyuy</a> (Leader of Polish Ecology) [PL MoE 2012];</li> <li>– Other initiatives from industry [PL MoE 2012]: <ul style="list-style-type: none"> <li>○ <a href="http://www.kigo.pl/">http://www.kigo.pl/</a>; <a href="http://www.pigo.org.pl/">http://www.pigo.org.pl/</a>;</li> <li>○ <a href="http://www.zpgo.pl/">http://www.zpgo.pl/</a>;</li> <li>○ <a href="http://www.marinelittersolutions.eu/plasticseurope/our-projects/raising-awareness/recykling-rejs.aspx">http://www.marinelittersolutions.eu/plasticseurope/our-projects/raising-awareness/recykling-rejs.aspx</a>;</li> </ul> </li> <li>– Initiatives from NGOs (examples): <a href="http://www.ustawa-odpadowa.abrys.pl/">http://www.ustawa-odpadowa.abrys.pl/</a>, <a href="http://odpady.net.pl/">http://odpady.net.pl/</a> [PL MoE 2012];</li> <li>– Example of a training programme for municipalities: <a href="http://www.oskzg.pl/projekt-szkoleniowy.html">http://www.oskzg.pl/projekt-szkoleniowy.html</a> [PL MoE 2012].</li> </ul>
--	---

Municipal waste generation	PL	EU 27
<i>Total amount of MW generated (in kt)</i>	12,038	252,095
<i>Total amount of MW generated per capita (in kg)</i>	315	502
Collection infrastructure (municipal waste including bio-waste and packaging waste) [EUROSTAT 2010]		
<i>Collection coverage for MW (in %)</i>	79.8	96.6

#### **Collection systems and related infrastructure**

- Currently, companies providing waste collection services gather wastes from inhabitants under the contract (the fee is paid directly by inhabitant to the service company). Since 1 July 2013, due to the introduction of a new municipal waste management system, companies will be chosen via public procurement by each municipality. The fee will be paid by the inhabitant to the municipality.;
- Collection services are contracted via public procurement (municipal or private service providers); high competition in urban areas, nearly no competition in rural areas [ReTECH PL 2009];
- Ca. 400 municipal organizations (MPO Sp.zo.o) operating as well as several joint ventures/PPP and private, mostly internationally operating companies;
- Waste containers or bags are used for kerbside collection of municipal waste as well as centrally located containers (bring systems) for separately collected waste [ReTECH PL 2009];
- Approximately 20 % of the population is excluded or not regularly covered by municipal waste collection system. In rural areas the collection frequency is often very long (more than two weeks) which leads often to self disposal activities [ReTECH PL 2009]; [EUROSTAT 2010];
- Separate collection of certain waste (WEEE, batteries, paper, plastic and glass) is an obligation implemented through the amendment of Waste Act of 2005 [ReTECH PL 2009] and separate acts on these streams;
- Insufficiently developed scheme for selective collection of packaging waste originated from households;
- In conclusion, the collection infrastructure for packaging waste seems to be limited;
- Additional separate collection for several wastes including metal, bulky waste, tyres, oils, cars and medicine [ReTECH PL 2009].

**Information on collection and recovery systems for packaging waste**

Packaging waste is collected in many ways including container collection and plastic bags. Household and industrial packaging waste are collected in parallel via household and industrial systems. In Poland there are about 36 compliance schemes. Coverage of the system is as follows: WMC cooperating with Rekopol are running selective collection systems in the territory with a population of 26 million inhabitants. The real coverage of selective collection is estimated to be about 13 millions [Pro Europe PL 2012]. The system mentioned covers 1,069 municipalities i.e. 43.1 % of municipalities. Rekopol cooperates with 2,083 companies introducing packaging in the Polish market. In the level of collection competition exists between different WMC and concerns mainly municipal waste. In case of plastic packaging competition can be observed in the level of recyclers mainly in PET [Pro Europe PL 2012].

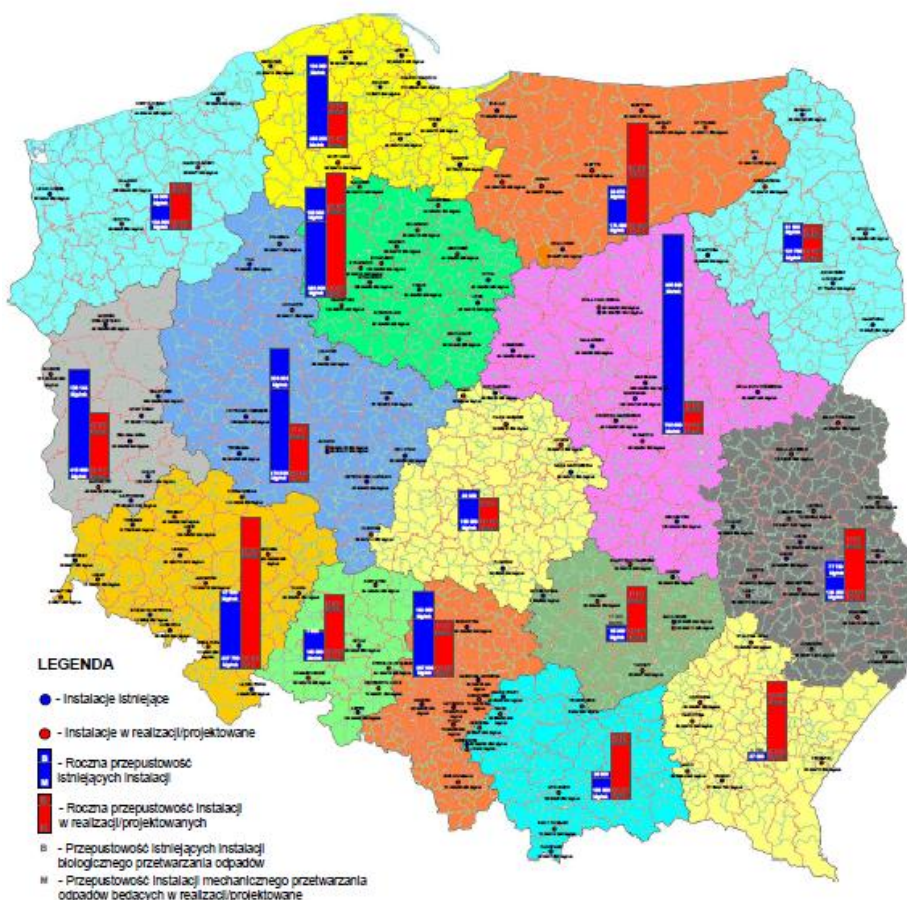
**Treatment infrastructure for municipal waste**

<i>Self-sufficiency for disposal of total waste (in %)</i>	100 (except for PCB containing equipment), [EC 2012b]	
<b>Treatment rates [EUROSTAT 2012b]</b>	<b>PL</b>	<b>EU 27</b>
<i>Recycling rates of municipal waste (in %)</i>	17.8	24.9
<i>Composting rates of municipal waste (in %)</i>	7.9	14.7
<i>Recovery rates of municipal waste including incineration with energy recovery (in %)</i>	0.0	17.2
<i>Incineration rates of municipal waste (incineration without energy recovery) (in %)</i>	1.0	-
<i>Disposal rates of municipal waste (in %)</i>	73.4	38.2

**Information on treatment facilities, compliance/BAT and capacity<sup>4</sup>**

<i>Pre-treatment facilities</i>	<ul style="list-style-type: none"> <li>– Regular technical facilities available but not up-to-date technical standards (modernisation necessary) and not sufficient pre-treatment capacity available [ReTECH 2009];</li> <li>– Mostly operated by private companies [ReTECH 2009];</li> <li>– 11 MBT facilities [Przygoński 2012];</li> <li>– 86 sorting facilities for separately collected waste in 2009 [Przygoński 2012];</li> <li>– 87 sorting facilities for mixed household waste in 2009 [Przygoński 2012];</li> <li>– Map on MBTs [PL MoE 2012].</li> </ul>
---------------------------------	--

<sup>4</sup> Changes in infrastructure and therefore treatment capacity were reported by the MoE to be very dynamic. Therefore, exact data on the present status are only rough estimations [PL MoE 2012].

	<p style="text-align: center;"><b>Mapa lokalizacji instalacji mechaniczno-biologicznego przetwarzania odpadów w Polsce</b></p>  <p><b>LEGENDA</b></p> <ul style="list-style-type: none"> <li>● - Instalacje istniejące</li> <li>● - Instalacje w realizacji/projektowane</li> <li>■ - Roczna przepustowość istniejących instalacji</li> <li>■ - Roczna przepustowość instalacji w realizacji/projektowanych</li> <li>■ - Przepustowość istniejących instalacji biologicznego przetwarzania odpadów</li> <li>■ - Przepustowość instalacji mechanicznego przetwarzania odpadów będących w realizacji/projektowane</li> </ul>
<p><i>Recycling facilities</i></p>	<ul style="list-style-type: none"> <li>- 90 composting plants in 2009 [Przygoński 2012];</li> <li>- 3 fermentation plants [Przygoński 2012].</li> </ul>
<p><i>Incinerators with energy recovery</i></p>	<ul style="list-style-type: none"> <li>- 1 incinerator for municipal waste (Solid Communal Waste Utilisation Plant in Warsaw) with a capacity of 0.04 Mt/year (2009), [EC 2012];</li> <li>- 8-10 incinerators for incineration of municipal waste are planned, concretised for Poznań, Konin, Szczecin, Koszalin, Kraków, Bydgoszcz, Łódź [ReTECH PL 2009]. In 2012 there are 6 projects on the main list: Kraków, Szczecin, Bydgoszcz, Białystok, Konin and Poznań [PL MoE 2012].</li> </ul>
<p><i>Incinerators without energy recovery</i></p>	<ul style="list-style-type: none"> <li>- Use of refused derived fuels (RDF) in the cement industry [ReTECH 2009]; capacity of the cement industry is ca. 1.5 Mt.</li> </ul>
<p><i>Landfills for non-hazardous waste</i></p>	<ul style="list-style-type: none"> <li>- 610 landfills (status 2010), ; in 2010 91,93% of municipal waste was landfilled on landfills which fulfil EU requirements [PL MoE 2012];</li> <li>- Existence of illegal dumpsites [ReTECH 2009]; [PL MoE 2012];</li> <li>- Rest capacity of landfills for non-hazardous waste in 2009: 1,067,676. 670 t [PL Landfill 2007-2009];</li> <li>- In general, landfills for municipal waste are administrated by companies – public and private [PL MoE 2012].</li> <li>- According to Kpgo 2010, by 2014, as a result of EU requirements, the number of landfills will</li> </ul>

	be reduced to a maximum of 200 (i.e. 75 %), implying that if current waste management methods remain the same, landfill capacity will run out within 8 years [Ernst & Young 2011].									
<b>Infringement procedures and court cases related to WFD and Landfill Directive</b>										
<i>Number of infringement procedures and cases brought to the CJEU1</i>	1 infringement procedure (2011/2025) with regard to the Packaging Directive [PL MoE 2012]; Number of cases brought to the CJEU – 1 (WFD C-308/12) [PL MoE 2012].									
<b>Fulfilment of targets related to biodegradable waste going to landfills</b>										
<i>Fulfilment of target of the Landfill Directive on biodegradable waste going to landfills</i>	Reduction target status in 2009: 93.6 % in comparison to 1995 [EC 2012a] According to the MoE the reduction target status in 2010 was already 79 % [PL MoE 2012]									
<b>Statistics on packaging waste [EUROSTAT 2012d]</b>										
	<b>Plastic packaging waste</b>		<b>Paper packaging waste</b>		<b>Metal packaging waste</b>		<b>Glass packaging waste</b>		<b>Total packaging waste</b>	
	<i>PL</i>	<i>EU</i>	<i>PL</i>	<i>EU</i>	<i>PL</i>	<i>EU</i>	<i>PL</i>	<i>EU</i>	<i>PL</i>	<i>EU</i>
<i>Total amount generated (in kt)</i>	666	14,590	1,193	29,783	207	4,544	837	16,006	3,780	76,593
<i>Total amount generated per capita (in kg)</i>	17.5	29.2	31.3	59.5	5.4	9.1	21.9	32	99.1	153.1
<i>Share of total packaging waste (in %)</i>	17.6	19	31.6	38.9	5.5	5.9	22.1	20.9	100	100
<i>Recycling rates (in %)</i>	21.5	32.2	50.9	83.4	43.1	69.5	41.9	67.6	36.8	62.5
<i>Recovery rates including incineration with energy recovery (in %)</i>	39.2	59.7	56.8	90.7	43.1	69.9	41.9	67.6	50.3	51.1
<i>Disposal rates (in %)</i>	60.8	40.3	43.2	9.3	56.9	30.1	58.1	32.4	49.7	25.4
<b><i>Fulfilment of target of the Packaging Directive on recycling</i></b>	<b>yes</b>	<b>n/a</b>	<b>yes</b>	<b>n/a</b>	<b>yes</b>	<b>n/a</b>	<b>yes</b>	<b>n/a</b>	<b>yes</b>	<b>n/a</b>

<b>Next steps planned by CA/ EU funds</b>	<b>Measures planned</b>	<b>Implementation likely?</b>
<i>Economic instruments</i>	<ul style="list-style-type: none"> <li>– Increase of landfill tax.</li> </ul>	<p>Yes. The level of increase of the landfill fee is not yet determined: There are no binding decisions in this field. A new regulation of the Council of Ministers is planned for the middle of 2013 and probably will enter into force in January 2014 [PL MoE 2012].</p>
<i>Collection (separate collection)</i>	<ul style="list-style-type: none"> <li>– In 2013 a new waste management system will be implemented in municipalities. The selective collection will be obligatory and will have to fulfill the targets set by the 2008 WFD [Pro Europe PL 2012].</li> </ul>	<p>Yes</p>
<i>Compliance with Landfill Directive</i>	<ul style="list-style-type: none"> <li>– Further closure of landfills (reduction of landfills to a maximum of 200 (i.e. 75 %), [Ernst &amp; Young 2011].</li> </ul>	<p>Yes, if sufficient alternative infrastructure will be in place</p>
<i>Treatment</i>	<ul style="list-style-type: none"> <li>– OPI&amp;E provides between 2007-13 about 1.5 billion Euro for improvement of waste infrastructure; about 3.3 billion Euro is needed for investments to reach targets of 2020 (reduction of biodegradable waste to 35% and establishment of sorting capacity until 2015); for financing facilities by the EU Cohesion Fund these need to be set up until 2015 [ReTECH 2009];</li> <li>– 8-10 incinerators for incineration of municipal waste are planned, concretised for Poznań, Konin, Szczecin, Koszalin, Krakow, Bydgoszcz, Łódź [ReTECH 2009]; There are 6 projects on the main list: Kraków, Szczecin, Bydgoszcz, Białystok, Konin and Poznań [PL MoE 2012];</li> <li>– Altogether there are 33 projects in the field of waste management in the Operation Programme „Infrastructure and Environment“ (2.1.). Also other funds (including European) finance projects in the field of waste management [PL MoE 2012].</li> </ul>	<p>Yes, if sufficient financial support will be available, but there are also some administrative obstacles [PL MoE 2012]</p>
<i>Information and awareness campaigns</i>	<ul style="list-style-type: none"> <li>– New information and awareness campaigns on waste management are organised by the Ministry of the Environment. In 2012 a campaign will be devoted to waste prevention and proper collection/“treatment” of waste at households (mainly in rural areas and small towns). In 2013 a campaign will inform citizens on implementation of new legal provisions regarding a new municipal waste management system. A variety of mass media will be used, including TV and radio [PL MoE 2012];</li> <li>– Also municipalities are obliged to organise such campaigns [PL MoE 2012].</li> </ul>	<p>Yes</p>

**Information sources:**

[BiPRO 2007-2011] BiPRO. 2007-2011. Awareness Reports on Implementation of EU waste legislation in Member States.  
<http://www.bipro.de/waste-events/index.htm>

[PL MoE 2012] Information provided by the Polish competent authority (Ministry of the Environment).

[CIA 2012] <https://www.cia.gov/library/publications/the-world-factbook>, accessed in April 2012

[EC 2011] European Commission. 2011. Annual report on monitoring the application of EU law.  
[http://ec.europa.eu/eu\\_law/infringements/infringements\\_annual\\_report\\_28\\_en.htm](http://ec.europa.eu/eu_law/infringements/infringements_annual_report_28_en.htm)

[EC 2012] European Commission. 2012. Use of economic instruments and waste management performances. The final report from 15 February 2012. [http://ec.europa.eu/environment/waste/pdf/final\\_report\\_10042012.pdf](http://ec.europa.eu/environment/waste/pdf/final_report_10042012.pdf)

[EC 2012a] European Commission. 2012. Background data on the fulfilment of targets of the Landfill Directive. Unpublished document.

[EC 2012b] European Commission. 2012. Final implementation Report for the Waste Framework Directive 2006/12/EC (2007-2009) and Triennial Member States' reports on the implementation of waste legislation of (covered by Directive 91/692/EEC) on Directive 2006/12/EC on waste.

[EC 2012c] European Commission. 2012. Final implementation Report for the Packaging and Packaging Waste Directive 94/62/EC.

[EC 2012e] European Commission. 2012. Final Implementation Report for the Directive 1999/31/EC on the Landfill of Waste (2007-2009) and Triennial Member States' reports on the implementation of waste legislation of (covered by Directive 91/692/EEC) on Directive 1999/31/EC on landfills.

[EC 2012f] European Commission. 2012. Country-specific Recommendations 2012-2013  
[http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index\\_en.htm](http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index_en.htm), accessed 19 June 2012.

[EEA 2010] European Environmental Agency. 2010. SOER country assessments (section "material resources and waste").  
<http://www.eea.europa.eu/soer/europe/material-resources-and-waste><sup>5</sup>.

[EEA 2010b] European Environmental Agency. 2010: SOER country assessment (section "country profile").  
[http://www.eea.europa.eu/soer/countries/folder\\_listing](http://www.eea.europa.eu/soer/countries/folder_listing)

[EEA 2012] Waste Implementation Project, Ex-post MSW analysis, Poland, Final draft prepared by ETC/SCP

[EIONET 2009] European Topic Centre on Sustainable Consumption and Production. Country fact sheets on waste policies – 2009 edition. [http://scp.eionet.europa.eu/facts/factsheets\\_waste/2009\\_edition](http://scp.eionet.europa.eu/facts/factsheets_waste/2009_edition)

[Ernst & Young 2011] Ernst & Young. 2011. Key issues in municipal waste management in EU-11 countries.  
[http://www.ey.com/Publication/vwLUAssets/Key\\_issues\\_in\\_municipal\\_waste\\_management\\_in\\_EU-11\\_countries/\\$FILE/Raport\\_eng.pdf](http://www.ey.com/Publication/vwLUAssets/Key_issues_in_municipal_waste_management_in_EU-11_countries/$FILE/Raport_eng.pdf)

[ETC/SCP 2012] European Topic Centre on Sustainable Consumption and Production. Working paper: Overview of the use of landfill taxes in Europe, Final draft report February 2012.  
[http://ec.europa.eu/environment/waste/pdf/final\\_report\\_10042012.pdf](http://ec.europa.eu/environment/waste/pdf/final_report_10042012.pdf)

[EUROSTAT 2010] EUROSTAT. 2010. Internal working document on collection coverage in MS indicating the rate for collection coverage data for 1995 - 2010. Document unpublished.

<sup>5</sup> Searchable at  
[http://www.eea.europa.eu/soer/countries#c11=CommonalityReport&c11=DiversityReport&c11=FlexibilityReport&c12=all&c5=waste&b\\_s tart=0](http://www.eea.europa.eu/soer/countries#c11=CommonalityReport&c11=DiversityReport&c11=FlexibilityReport&c12=all&c5=waste&b_s tart=0)

<sup>6</sup> Searchable at  
[http://www.eea.europa.eu/soer/countries#c11=CommonalityReport&c11=DiversityReport&c11=FlexibilityReport&c12=all&c5=waste&b\\_s tart=0](http://www.eea.europa.eu/soer/countries#c11=CommonalityReport&c11=DiversityReport&c11=FlexibilityReport&c12=all&c5=waste&b_s tart=0)

**[EUROSTAT 2012a]** EUROSTAT. 2012. Information on capacity for landfilling and incineration of EU Member States and regions (2004-2008). For the years 2004 and 2006 data on the number and capacities of waste treatment facilities are published already at <http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/documents/Waste%20treatment%20facilities.mht>. 2008 data are available within an internal document not yet published.

**[EUROSTAT 2012b]** Data on municipal waste generation and treatment in 2010. [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Waste\\_statistics](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Waste_statistics) and [http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database), accessed January 2012.

**[EUROSTAT 2012c]** Data on population in 2011. [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo\\_gind&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_gind&lang=en), accessed April 2012.

**[EUROSTAT 2012d]** Data on packaging waste generation and treatment in 2009. <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=1&language=en&pcode=ten00063>, accessed April 2012.

**[PL Landfill 2007-2009]** Report of the Republic of Poland on the transposition and implementation of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1 and OJ L 284, 31.10.2003, p. 1) for the period from 1 January 2007 to 31 December 2009.

**[Pro Europe PL 2012]** Response to questionnaire sent by BIPRO to Pro Europe.

**[Przygoński 2012]** WFD as the guidance line towards waste hierarchy. Presentation of Piotr Przygoński from PIGO; ALBA S.A. at the FEAD BDE Seminar „Moving up the waste hierarchy – best practice examples, IFAT ENTSORGA Fair, Munich, 10 May 2012.

**[RETech 2009]** RETech. Waste Management. Made in Germany. Die Exportinitiative Recycling- und Effizienztechnik. Länderprofil Abfallwirtschaft. [http://www.retech-germany.net/themen/laender\\_und\\_maerkte/laenderprofile/dok/323.php](http://www.retech-germany.net/themen/laender_und_maerkte/laenderprofile/dok/323.php)