Czech Republic: Resource Efficiency

Position of CEE Bankwatch Network on Resource Efficiency in the programming period 2014-2020 in the Czech Republic

Recommendations

CEE Bankwatch Network proposes the following:

- In order to increase resource efficiency, to set targets for decreasing waste production, decreasing municipal waste production and increasing material recovery of municipal solid waste.
- In order to comply with the binding waste hierarchy, not to finance projects for energy recovery of mixed municipal waste from public funds
- In order to reach the targets set in the Landfill Directive, mandatory separation of biowaste has to be started quickly and efficiently, along with support for biogas stations treating the bio-waste fraction of municipal solid waste.
- Experience in the course of the 2007-2013 programming period showed that the implementation of projects by far missed the main target of decreasing the amount of waste. Having this in mind it is necessary that EC requires guarantees from the Czech Republic in order to adhere to the waste hierarchy and prefer material recovery instead of less preferable means of waste treatment.

Description of the problem

The material and energy intensity of the economy should be greatly reduced through well-organized waste management. The most significant reduction of material and energy consumption occurs when making the same kind of product but with less waste. For example it is necessary to use approximately 7 kg of raw materials in the production of one kilogram of aluminium cans[52]. "When incinerated, the high calorific value of aluminium foil provides a valuable fuel substitute", says the European Aluminium Association[53]. However, aluminium has a calorific value of 31 MJ per kilogram, but the manufacture of a kilogram of aluminium needs 128 MJ. Recycling of 1 kg of aluminium saves not only 7 kg of bauxite and 1 kilogram of waste, but in addition 4kg of chemical products and 50 MJ of electricity[54].What about if the can somehow be used several times? And what if we can prevent the need to manufacture the aluminium can altogether through use of other re-usable receptacles?

The Waste Framework Directive set a binding waste hierarchy: prevention, reuse, material recovery, energy recovery and in last place is the simple disposal of waste. The hierarchy indicates that it is energetically and materially favourable to prevent, reuse and recycle products. Effective recycling reduces dependence on imported raw materials, saves energy and creates more jobs than other methods of waste management. The Czech Republic should therefore take advantage of this unique opportunity to acquire the necessary funds for its recycling industry.

Total waste production decreased by 12% between 2003 and 2010 and year-on-year total waste production decreased by 1,4%[55]. Waste production in recent years stood at around 33 million tonnes. Waste disposal facilities have sufficient capacity, especially landfilling, which is still the most common disposal method in Czech Republic.

52 Personal communication, ACRA, may 1993; Boustead and Hancock: EEC Directive 85/339 UK Data 1986, Open University, 1989 in Over packaging wasting money, wasting resources, FOE, London, June 1993
53 RAA: Aluminium in packaging, February 2007, see: http://www.alueurope.eu/wp-content/uploads/2011/10/Aluminium-in-packaging-brochure.pdf
54 Waste Watch: Aluminium recycling, 2005 see: dl.dropbox.com/u/21130258/resources/InformationSheets/metals.pdf
55 Report on the Environment of the Czech Republic 2010, see: http://www.mzp.cz/en/report_environment_2010

Insufficient attention is paid to the collection of sorted waste, the biodegradable fraction of municipal waste and recycling of municipal waste. There is high production of municipal solid waste per capita, around 510 kg per year[56] in the Czech Republic. The share of municipal waste recycling was only 24.3% in 2010,[57] while the EU15 average is in excess of 40%.[58] There are not enough recycling and treatment capacities to increase the recycling and biowaste treatment in the Czech Republic.

The priorities of the Czech Republic in the waste management sector are clearly set out in the Waste Management Plan adopted by the Government in 2003. The plan declares these strategic goals: "to decrease specific production of waste regardless of the level of economic growth, to maximise usage of waste instead of primary natural sources and to minimise negative health and environmental impacts of waste management." For municipal waste, the Plan clearly sets the priority of material recovery. The goal was to increase material recovery by 50% in 2010.

However because of very bad leadership in the EU Structural Funds in the programming period 2007-2013 the Czech Republic failed in its target to increase material recovery by 50%, and to decrease production of municipal solid waste, as well as failing in its target to build enough capacities to fulfil the requirements of the Landfill Directive.[59] For example the indicator in the Environment Operational Programme (OPE) contains the amount of municipal waste – but the expected output is not a decrease, but an increase from 4 million tonnes per year in 2006 to an estimated 5 million tonnes in 2013. This is an average increase of more than 8% per year. The OPE did not include the goal of increasing material recovery by 50% in 2010 either. The money from European funds for improving waste management in CEE countries like the Czech Republic have been spent without evidence about their influence on waste prevention, reuse and recycling of waste.[60]

European context

In the proposed new Czech National Energy Concept, draft national Waste Management Plan the Government and draft new waste law does not want to focus on waste prevention and recycling, but on energy recovery (new waste incinerators are planned to be built with European funds and with wide governmental support). The main reason is pressure from the Association for District Heating which wants to burn waste instead of coal. But these plans are in conflict with the European waste hierarchy and sap the European push towards a materially efficient economy.

The Czech Government has proposed these plans even though the European Commission has given clear signals that the Czech Republic has to change its current practice. In the key European strategy Europe 2020 member states shall: "use regulation, building performance standards and market-based instruments such as taxation, subsidies and procurement to reduce energy and resource use and use structural funds to invest in energy efficiency in public buildings and in more efficient recycling." The Roadmap to a Resource Efficient Europe[61] also lays out this goal: "Ensure that public funding from the EU budget gives priority to activities higher up the waste hierarchy as defined in the Waste Framework Directive (e.g. priority to recycling plants over waste disposal) (in 2012/2013)" In addition the future target of the Commission for waste generation is: „Waste generated per capita is in absolute decline."

Specific measures

The supported measures must explicitly follow these long term goals: to decrease generation of waste and use waste as a secondary material.

Change of the production system (innovation) with reusable, re-used, easily repairable and completely recyclable products as the result

If the result is to be a reduction in total waste production, industry must undergo a fundamental change in production. Funds available from the Structural Funds should be an impulse for innovation. The result of these innovations should be more reusable products, more really reused products, and products which are easily repairable and completely recyclable.

Systems of complex[62] management of biodegradable waste

Complex management of biodegradable waste should include household and community composting, separate collection of garden waste and kitchen waste, composting plants and biogas stations for bio waste processing. The Czech Republic

56 Report on the Environment of the Czech Republic 2010, see: http://www.mzp.cz/en/report_environment_2010
57 Report on the Environment of the Czech Republic 2010, see: http://www.mzp.cz/en/report_environment_2010
58 Report on the Environment of the Czech Republic 2010, see: http://www.mzp.cz/en/report_environment_2010
59 See data from Eurostat
60 The Landfill Directive requires a decrease in the amount of landfilled biowaste, however it is possible to separate biowaste only in a few municipalities. Consequently the mixed municipal waste contains a high ratio of biowaste and ends up in landfill or incinerators See: http://bankwatch.org/sites/default/files/briefing-waste-hierarchy-Mar2012.pdf
61 Roadmap to a Resource Efficient Europe, Brussels, 20.9.2011, COM(2011) 571 final
62 Systems have to be comprehensive to ensure that such resources invested in home composting will not be depreciated by introducing collection of biodegradable waste

is having problems meeting the targets from the Landfill Directive on decreasing the content of biodegradable waste in landfills. There is huge potential in the municipal sector. The Czech Republic has a well-established separation system for paper, plastic and glass packaging, but household organic waste can be separated only in a few places. In the previous programming period (2007-2013) municipalities had a considerable interest in these projects; we can therefore expect the continuation of this trend.

A bio-waste management system must be secured as a complex whole, including activities from different levels of the waste hierarchy: support for home composting - prevention, separate collection of bio-waste for composting - recycling, etc. Only a complex system of bio-waste management ensures that steps are not designed in conflict with the waste hierarchy and that they will reduce the amount of municipal waste.

Payment for waste with waste reduction

Reduction of waste generation will take place only if the producers of waste change their behaviour. The producers of municipal solid waste are municipalities by law, but in reality these are ordinary people. Structural Funds should support innovation on the municipal level based on a change of collection system or waste payment system, provided that this will lead to reduction of municipal waste.

Construction, or increased capacity (innovation) for waste reuse centres (bazaar, repair and re-sale centres) with waste reduction as the result

Reuse is the second important step of the waste hierarchy. It totally lacks financial support from official sources in spite of its potential for creating new jobs. The best reuse centres network is in Flanders. The aim there is that the reuse sector will be achieving an average of 5 kg of reused goods per resident and employing 3,000 people by the year 2015 in this part of Belgium[63]. Reuse projects that will lead to waste reduction should receive at least investment support.

Targets and indicators for material efficiency

Properly set and selected indicators are essential to achieving the objective of increasing material efficiency. This is confirmed by experience in the programming period 2007-2013. The aim of the Operational Programme for Environment (hereafter OPE) was to reduce the amount of waste. The Programme Document OPE and the Implementation Document OPE defined the global aim of priority axis 4 for the period 2007 to 2013: "improve waste management, waste reduction and elimination of old environmental burdens"[64]. According to the Implementation Document OPE the aim of priority axis 4.1 is: "reducing waste, increasing the proportion of recovered waste by supporting the separate collection of waste ..."The indicator to measure the fulfilment of this goal was set as "The volume of municipal waste (production)". However, as noted above, the target value of the indicator was chosen higher than the initial one, ie. the indicator expected an increase of waste production instead of a decrease. The issue was discussed at several OPE Monitoring Committees, mentioned by the ex-ante evaluator in 2006 and by the Supreme Audit Office in 2011.[65]

The Ministry of Environment still has not addressed the problem. The wrongly selected indicator value and poor management of the OPE contributed to the non-fulfilment of the target to reduce waste. According to the Europe 2020 policy the Czech Republic should establish regulatory and market-based instruments to reduce consumption of resources. Structural Funds in the years 2014 - 2020 should therefore be used primarily to invest in more efficient recycling. Europe 2020 confirmed the legitimacy of targeting the national Waste Management Plan and Structural Funds in 2014-2020 at reducing the amount of waste and increasing recycling as the most effective ways of reducing resource consumption.
In order to reflect the Europe 2020 strategy and to increase material efficiency we propose the following indicators:

Decrease the overall amount of waste
Indicator: waste production
Target year: 2020
Value for 2010: 31 811 000 t
Target value for 2020: 30 000 000 t
Data source: CENIA
The aim of the indicator is to support projects leading to waste prevention and reuse in industry.

63 www.ovam.be/jahia/Jahia/pid/2412
64 Implementation document OP ENVIRONMENT 2007-2013, pg. 47
65 Audit conclusion from audit No. 10/14, see: www.nku.cz/assets/media/k10014_en.pdf

Decrease the amount of municipal waste
Indicator: municipal waste production
Target year: 2020
Value for 2010: 3 334 000 t[66]
Target value for 2020: 3 000 000 t

Data source: ČSÚ, municipal solid waste production
The aim of the indicator is to support projects leading to waste prevention and reuse in municipalities.

Increase material recovery of municipal waste
Indicator: material recovery ratio of municipal waste
Target year: 2020
Value for 2010: 24.3 %
Target value for 2020: 50 %
Data source: CENIA
The aim of the indicator is to support projects leading to waste separation, recycling and other material recovery

66 This number is valid for the previous methodology for the calculation of municipal waste production. This methodology was used to gain the data for 2003-2008. For 2009 and 2010 a new methodology was used for the calculations. This means the data for the period 2003-2008 are not comparable with data for 2009 and 2010.