



INDUSTRY OVERVIEW OUTLINE

CZECH REPUBLIC: Recycling Equipment Market

In

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Summary

Starting May 1, 2004, the Czech Republic is a full member of the European Union (EU), and its policies in the environmental sector must harmonize with EU requirements. So far these EU requirements have been one of the main drivers in the Czech waste management sector. The EU focus on recycling and re-use has also been introduced to the country in recent years, following an EU trend of creating in Europe a 'recycling society'. But while the level of recycling and composting has improved significantly in the Czech Republic in recent year, there is still a long way to go to achieve the levels typical in Western Europe.



Market Demand

In 2004, the overall production of waste in the Czech Republic reached an estimated 38,704 thousand tons. Over 10% of the total waste production consisted of municipal waste. One citizen produces approximately 330 kg of waste a year, below the EU average. On the other hand, the Czech Republic still lags behind the original EU-15 countries in the amount of waste it recycles.

Table 2: Waste Generation in the Czech Republic by sector (in thousands of tons)

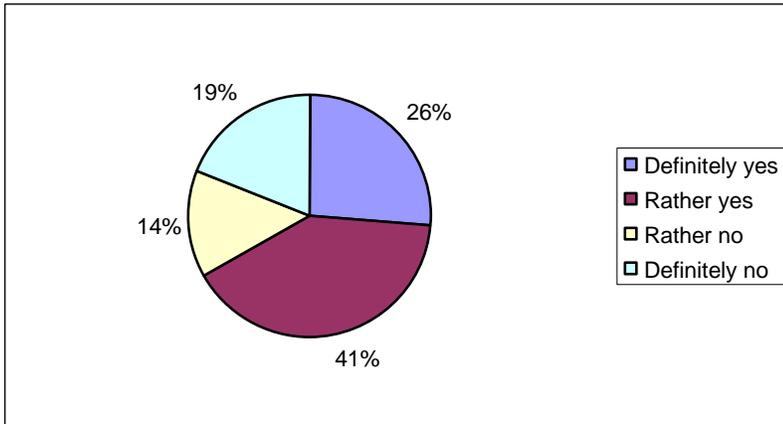
<i>Sector</i>	<i>Total in 2004</i>
Agriculture and forestry	3,876
Mining and quarrying waste	685
Industrial waste	7,647
Waste from Water Purification and Distribution	669
Waste from Construction	9,179
Waste from energy production (excl. radioactive waste.)	5,305
Municipal waste	4,651
Other waste	6,692
TOTAL	38,704

Source: Center for Waste Management

Waste separation is growing in the Czech Republic and most of the population – about 87 percent - considers it important. Plus, the distances that people have to travel from their home to collection bins are shrinking. At the end of 2005, there were over 128,000 collection containers placed in 5,221 municipalities (an increase of 400 from the previous year). The densest is a network of containers for plastics – approximately 50,000 containers in 83 percent of municipalities. However, recycling services could still be improved. As opposed to waste bins that are standing in front of every house, people have to go on average 170 meters to reach collection bins for recyclables. Those collection bins are also very often full to overflowing, making it impossible for people to dispose of their waste there. The company EKO-KOM, which is responsible for collecting recycling waste, is introducing measures to support recycling via a promotional campaign.

Czechs are encouraged to separate recyclables from the rest of their trash but they are not required to do so. Those who choose not to separate their waste are not fined or penalized.

Table 1: Willingness to support recycling without law enforcement



Source: EKO-KOM

Market Data

There are a number of methods used in the Czech Republic to recycle and re-use waste. As the recycling of materials and products becomes more important, new ways of treatment are introduced.

Table3: Ways of Handling Selected Wastes for Recycling and Reuse in the Czech Republic in 2004 (in tons)

Way of Handling Waste for Recycling & Re-use	Hazardous Waste	Other Waste	Total
Waste to energy	51,327	599,514	650,841
Elicitation / Regeneration of solvents	2,475		2,475
Elicitation / Regeneration of organic not used as solvents (including composting and other biological processes)	19,571	793,366	812,937
Elicitation / Recycling of metals and metal compounds	167,000	1,812,777	1,979,778
Elicitation / Recycling of other anorganic materials	110,375	2,601,334	2,711,709
Regeneration of acids or alkalines	409	9	418
Revitalization of substances used for lowering of pollution		494	494
Elicitation of catalyst parts	551		551
Refining of used oils or other way of oil re-use	5,179	828	6,007
Application into the soil that is asset to agriculture or improves ecology	10,079	2,212,736	2,222,815
Use of wastes that were emerged during the applications of all the above mentioned wastes	36,111	1,687,281	1,723,392
Use of wastes for recultivations, terrain applications, etc.	136,898	14,053,039	14,189,937
Use of WWTP sludge for agriculture	10	31,626	31,272
Total Use	539,3986	23,792,640	24,332,626

Source: Center for Waste Management

The Czech Republic is currently focusing on increasing adherence to EU requirements within several specific waste streams

Packaging waste

The Czech Republic follows EU legislation that requires its member states to attain the following targets by 31 December 2008 (note, however, that the Czech Republic has an exception until 31 December 2012):

- 1/ A minimum 60% of packaging waste will be recovered or incinerated at waste incineration plants with energy recovery;
- 2/ Between 55 and 80 % (by weight) of packaging waste will be recycled;
- 3/ The following recycling targets for materials contained in packaging waste must be attained: 60 % by weight for glass, 60 % by weight for paper and board, 50 % by weight for metals, 22.5 % by weight for plastics and 15 % by weight for wood.

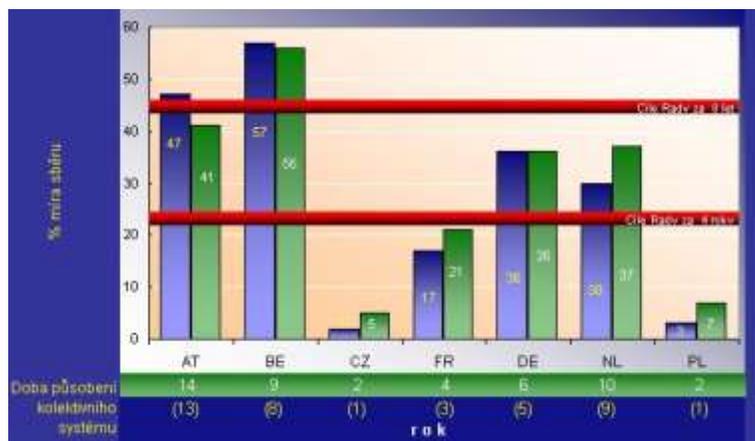


The Czech Republic has done an excellent job in implementing this legislation—in fact, it is one of the best among the new member states. In 2005, there were 850 thousands of tons of packaging waste produced in the Czech Republic, out of which 60 % was recycled. The highest level of recycling is in paper packaging, about 84% ; recycling of glass packaging is at about 75% The latest reports show that the Czech Republic is on the level of Austria, Denmark or Sweden in this area.

Batteries

In November 2003, the European Commission issued the new battery directive COM 2003/723, revising the original 1991 directive. The new directive applies to all batteries and accumulators placed on the EU market: portable batteries used by the general public, car batteries, and industrial accumulators. As an EU member, the Czech Republic must reach a minimum collection target for consumer batteries of 160 kg per capita for spent portable batteries, corresponding to 4–5 portal batteries per person per year. An additional target is set for portable nickel-cadmium batteries (NiCd): 80% of the Nickel-cadmium batteries generated annually. The recycling target for portable, industrial and automotive batteries collected is 100%. A 10% exemption is allowed for batteries that are not in a condition to be recycled. The collection targets will apply 4 years after the adoption of the directive, around 2010. In the Czech Republic, battery collection was institutionalized in 2001 when the Czech Association of Manufacturers and Importers signed an agreement with the Czech Ministry of Environment to help institute a complex collection program of batteries. The ECOBAT system was introduced to offer an opportunity to manufacturers and battery suppliers to meet their collection responsibilities.

Table 4: Percentage of batteries collected in selected EU countries in 2004, and years of existence of complex collection systems (the lower red line indicates EU goal in 4 years starting 2004, the higher red line a goal of 8 years)



Source: Ecobat

WEEE (Waste Electric and Electronic Equipment)

Electric and electronic devices are a major category of waste targeted by European legislation, and new types of devices are continually being added to those that already carry take-back obligations. In August 2005, a new measure was introduced in the Czech Republic that incorporated recycling fees into electric and electronic devices. The Czech Republic has in recent years improved collection and re-use of large and small household appliances, audio and video equipment, information technology, telecommunication equipment, office equipment, electric tools, etc. However, there is still much to be done.

End-of-life vehicles (ELV)

Beginning in January 2006, a new quota applies in the Czech Republic to ELV of up to 3.5 tons. Following EU requirements, 85% of the vehicle's average weight must be re-used. (For vehicles manufactured before 1980, the target is 75%). After 2015 the targets for materials and energy re-use will be 95%. Every year approximately 100,000 cars reach their end of life and 150,000 cars come to market. To achieve the recycling targets, manufacturers are introducing new parts that should allow for easier re-use, and the use of certain hazardous substances has been limited. Approximately 75% of a car's weight consists of steel, which is easily recycled. The major challenge is posed by the remaining 25%, which consists mainly of tires, glass, plastics and liquids.



Used tires According to Ministry of the Environment statistics, the Czech Republic produces about 60,000 tons of used tires every year. There are four major companies in the country that are able to treat up to 40,000 tons, out of which 45 % is recycled and 55% is incinerated (however, incineration of tires might be banned by EU by 2010).

One major challenge is represented by tires that were imported to the Czech Republic in past years. These tires are not always recycled; however, since there is a ban on leaving tires on landfills, they are left unused in warehouses, where they should theoretically be left only on the condition that they will be recycled. The take-back system for used tires is not yet well developed in the Czech Republic.

Oil Waste

Oil waste is among the more recently imposed EU take-back obligations. By 2005, 100% of industrial waste oil is to be collected, with a goal of reusing 60%. In the Czech Republic, waste oil production is estimated at 4,500 tons a year. There have been several proposals for building a refinery to recycle waste oils in the Czech Republic, but none have succeeded given the potential problems of use of recycled oils.

Exchange rate: 24 crowns=1 dollar. Estimated inflation rate: 2 to 3 percent.

Best Prospects

U.S. exporters can be successful in the Czech waste market if they offer technically advanced and price competitive technologies that save waste recyclers time and money..

The best prospects for manufactured goods include innovative, sophisticated products such as:

- Testing / analyzing instruments
- PVC/PET recycling technologies
- Sophisticated equipment for separation and waste recycling
- Mobile recycling systems for contaminated soil
- Odor control systems
- Other innovative or niche product.

Key Suppliers

The Czech Republic has a highly developed environmental industry with a well established environmental technology base.. Most Czech firms are small to medium-sized and privately –owned; a number of them are competitive even in overseas markets. Nevertheless, the Czech industrial capacity for environmental equipment is not large enough to supply the total Czech market; a considerable share of products is imported. European firms often penetrate the market by purchasing or partnering with Czech firms. While U.S. companies have enjoyed some success in this market, they have been far less aggressive than their European counterparts.

Prospective Buyers

The principal consumers of recycling equipment are municipalities and the public sector, and industry in general. Municipalities call for bids for the development of urban waste recycling projects. One of the government's major objectives is to increase the amount of waste recycled in the Czech Republic, thereby reducing the amount of waste that is simply dumped or incinerated.

Government and municipal purchases are based on tenders. The winner is expected to meet the specifications and offer the lowest price. Good connections and references are vital, and the assistance of a Czech partner is crucial.

Market Entry

The import climate is open and the Czech market is receptive to U.S. products. We recommend that a U.S. company interested in penetrating the Czech recycling market find a local partner/representative or open an office in the Czech Republic. Without a local representative who can support everyday contact with customers and government representatives, it is very difficult to succeed in the market. Generally, importers and agents have distribution channels already established and should have solid connections with end-users. Licensing should also be considered as a way to successfully enter the market. Selling directly from the U.S. is not recommended.

A U.S. company can stimulate further sales by working with Czech partners on effective marketing campaigns, as well as by utilizing trade shows, in-country promotions, and advertising. The U.S. Commercial Service offers a number of ways to help U.S. companies find business partners in the Czech market. These include setting up meetings with Czech companies interested in partnership, government officials and associations representatives (Gold Key Service), due diligence on prospective partners (International Company Profile) and events to introduce new product lines to potential customers (Single Company Promotion). More information and contacts can be found at <http://www.buyusa.gov/czechrepublic/en/>

Market Issues & Obstacles

The Czech Republic is obliged to apply external EU tariffs to imports from the United States and other non-EU countries. Goods imported to Czech Republic are also subject to a value-added-tax (VAT) of 5 or 19 per cent. Marketing and labeling requirements follow the EU standards. The metric system of weights and measures is standard in the Czech Republic. Czech is the official language in the Czech Republic. More than half of Czech company representatives are able to communicate in English or in German.

Trade Events

While there are no large waste management-specific trade shows or conferences in the Czech Republic, companies should consider attending several smaller ones. A number of environmental experts from the Czech Republic also visit trade shows in Germany and other European countries.

International Machine Tools Fair, Brno
September 18 – 22, 2006, www.bvv.cz/imt-gb
Wastes Luhacovice
September 19 – 21, 2006, www.jogaluhacovice.cz/cz/kongres2006.php
Environmental Fairs Brno
May 29 – 31, 2007, www.bvv.cz/envibrno-gb

Resources & Key Contacts

Ministry of Environment, www.env.cz
Ministry of Agriculture, www.mze.cz
State Environmental Fund, www.sfzp.cz
National Property Fund, www.fnm.cz
Association of Originators and Subjects dealing with Waste, www.apuso.cz
EKO-KOM, www.ekokom.cz
ECOBAT – www.ecobat.cz
Waste Forum magazine, www.odpadoveforum.cz
Waste Magazine, <http://odpady.ihned.cz>
American Chamber of Commerce, www.amcham.cz
General Directorate of Customs, www.cs.mfcr.cz

For More Information

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