The green issues of postal industry in Europe

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Abstract
The postal industry, along with many other industries is taking its share of the responsibility for global warming which is result of the increasing levels of carbon dioxide (CO2) in the atmosphere.
The paper provides clear and objective facts that demonstrate the "green issues" of each part of the value chain. The article gives arguments concerning actual environmental impact and efforts to reduce it.

Key words: Postal sector. Environmental issues. Paper mail value chain.

JEL Classification: Q50

1 Introduction

The global economic crisis has manifested itself in several ways that have had a direct impact on the postal sector: contraction of international trade, a downturn in the financial services sector and reduced advertising have converged to push down mail volumes, in some countries at an alarming rate.
Posts are responding in different ways, including cost cutting, network redesign and taking advantage of growth opportunities in new conception of value and supply chain. It is not clear if there are some positive impacts of the crisis and if the post will be able to react on it.

Nowadays, environment protection has become an indispensable element of postal development. There is undoubtedly greater awareness of environmental issues, but much remains to be done if the postal sector is to become climate neutral, optimise energy consumption and develop greener products.

2 Enviroment protection

Paper production or paper mail value chain in Europe is linked to grave negative impacts on forests, biodiversity, on water resources, on the global climate and on many human rights.

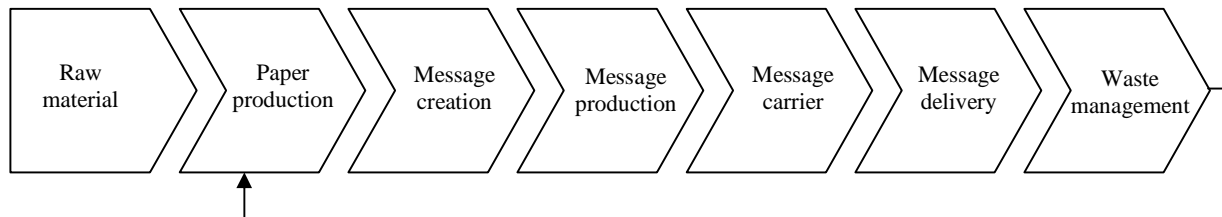Three main areas of energy use and emissions have been identified in postal businesses:
Operations - transport, fuel, heat, light, air conditioning, waste disposal.
Products - envelopes, packaging and stamps.

Value chains - mail printing, mail paper waste, courier bags and pallets, computers, office consumables, sorting machinery, uniforms, vehicles. [2]

The European Mail Industry Platform (EMIP) is a PostEurop initiative that was started in 2006. Its objective is to coordinate business activities to grow the written communications sector and thus support all industries involved in the paper mail value chain. [1]

Paper mail value chain

| Raw material | Paper production | Message creation | Message production | Message carrier | Message delivery | Waste management |

3 Raw material - wood production, forestry industry

Criticisms say that European paper based communications industry destroys forests to create products such as mailings, brochures, magazines, reports and envelopes. Research shows that these claims are unfounded. 44 % of Europe is covered in trees and forests in Europe have actually increased by 30 % since 1950. Europe has developed a well-balanced definition for sustainable forest management and forest health in Europe is good and improving.

The paper industry sources more than 80 % of its wood and its wood pulp form within Europe. 50 % of fibre for paper production is recovered paper and 50 % comes form wood residues generated by other industries (13 %) – from saw dust and woodchips from saw mills and commercial thinnings (20 – 25 %) – which are necessary to keep the forest healthy.

There are two forest management programmes operating in Europe: The Forest Stewardship Council (FSC) operates an international framework for forest certification and wood product labeling and Program for Endorsement of Forest Certification (PEFC) – which developed criteria and procedures for the assessment of national forest certification schemes in Europe.

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4 Paper production - paper industry

It is often heard that paper production has a big carbon footprint but in fact, an UN-led seminar on energy and forest products in October 2006 concluded that paper and print are part of the solution to reduce climate change.

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The paper-making industry uses raw fibrous materials (no high-value clear-wood) and the waste is minimized. 50 % of the fibre for paper production in Europe is recovered paper and 50 % is from new or virgin fibre, most of which is a by-product which may be potentially wasted (13 % - wood chips, saw dust, tops of the harvested trees, 20-25 % - comes from thinnings which is a management practice required during the lifecycle of a forest to ensure the forest remains healthy and are safe form risk of fire.).

CEPI member countries produced more than 100 million tones of paper and cardboard. In volume terms, graphic paper grades account for 48 % of paper production, packaging paper grades account for 40 % and hygiene and specialty papers for 12 %.

The paper industry in Europe is a world-leader in recycling. In 2007 more than 64 % of the paper and cardboard consumed in Europe was recycled. This industry is also a leader in supporting environmental project and research. The CEPI reports that CO2 emissions have been cut by 15 % form 2003 to 2006, energy consumption has been reduced by 30 % and 54,5 % of energy is derived today from renewable biomass forms. [1]

5 Message creation - communications industry

There are over 15 000 magazine publishers located throughout Europe that publish more than 50 000 magazine titles. The Direct and Interactive Marketing Industry is a popular communications channel form marketers and advertisers which covers catalogues, direct mail and e-communications. Direct Mail accounts for 1 % of the total paper consumption in an average county and the 90 % of the paper used in DM campaigns is recycled. Indeed, in most communities, only a fraction of a % of landfill consist of not recycled direct marketing materials. The DM industry aims to avoid or minimize waste. [1]

6 Message production - printing industry

Each printing process has its specific environmental impact. This is mainly associated to using inks, coloring agents and other chemicals which can be harmful to nature and to the health of workers. Use of vegetable based inks utilizing corn, walnut, coconut, linseed, canola and soy-bean oils are more friendly to environment because all this sources are renewable. This help optimizing print processes to reduce waste, innovating new dampening solutions in offset printing, changing and reducing cleaning agents and improving energy management strategies.

The ink manufacturing industry is directed by several European directives on the potential toxicity of chemical substances known as European Directives Substances. More recently European printers contributed to the successful implementation of the new European law on the use and control of chemicals and waste management practices. Reducing emissions and saving energy has become a priority amongst printing companies.

Digital printing is not necessarily better for the environment that traditional methods. Digital printing allow for the direct transfer of a digital image or text onto paper, foil, carton, etc. It produces little waste and ink or toner does not absorb into the paper. [1]

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7 The carrier - boxes and envelopes industry

The main product of this industry are paper and cupboard packaging (corrugated boxes, folding boxes, beverage cartons and paper sacks), sanitary and other household paper products, office stationary, envelopes, wallpaper, bookbinding, specialty papers and many other paper products. This sector is a strong supporter of recycling initiatives. The European Commission confirms that the volume of paper and cupboard packaging recycled is more than half of all the packaging materials recycled in the EU. Paper and cupboard packaging remains the European union champion for recycling and recycles over 84 % of its. 92 % of its fibres are from recovered paper.

Converted paper products have an impact on the environment during their life – from the forest management to the chemicals used for printing and the water and air pollution that occur during the converting process. Therefore the envelope industry has been working with the European Stationary industry to develop an eco-label for converted paper products (Paper by Nature). The study found that it is possible to recycle envelopes without any negative impact on the final recycling product. [1]

8 Delivery - postal industry

European Public Postal Operators emit between 8 and 11 millions tons of CO_2 annually. 50% of these CO_2 emissions result from the use of road transport, aviation and building energy usage (25-35 g CO_2 to deliver a mailpiece from sender to receiver).

Significant transport fleets, office buildings, post offices and sorting centers of postal industry affect on the environment. Mail delivery comprises about 0,1 % of the total household CO_2 emissions in Europe (14 kg of CO_2). However a single PC emits upwards of 495 kg of CO_2 annually (more than 2% of household emissions). Assumptions that electronic communication is better for the environment are incomplete.

Large number of postal operators have undertaken steps to reduce their environmental impact by introducing process optimization, alternative distributions vehicles and fuels.
People want paper-based advertising. The energy needed to crate the catalogues and deliver them to households, placing on order and delivering it to the homes needs to be compared with multiple families taking their cat to drive to shops (gas CO_2 pollution). [1]

The main goals of PostEurope´s environmental program – GHG:
- Reduce CO_2 emissions by 10% across all programme participants by 2012.
- Combat the causes of climate change (top environmental priority).
- Minimize use of natural resources such as fossil fuels and wood-based products.
- Increase use of alternative fuels (biogas).
- Promote innovative transportation methods and alternative vehicles.
- Optimize our network using state-of-the art IT tools to avoid unnecessary trips. [3]

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9 Waste Management and recycling

EU generates 1,3 billion tones of waste annually (530 kg/year per person) and waste still increasing. The industry supplies increasing amounts of the recovered products used as raw material in the European manufacturing industry. With 50% of its raw materials for production coming form recovered products, the paper and steel industries are the acknowledged market leader in Europe. Paper accounts for two-third of all the packaging material recovered for recycling – more than glass, metal and plastic combined.

The European Declaration on Paper Recycling has a recycling target of 66 % of paper consumed by 2010. This means, Europe will recycle 64 million tones of paper by 2010. The initiative was originally set up as part of the industry's corporate social responsibility. [1]

10 Conclusion

With new product and services which provide the value that customers are seeking, we take into account the environmental aspect. Positive aspect must be reinforced and negative aspect must be removed. Climate change is one of the most pressing concerns facing governments, companies and individuals. The postal sector, in common with other industry sectors, has a role to play in reducing its emissions of greenhouse gases such as CO_2.

For many posts, diversification and innovation are critical factors for future success. Combined with the post's major asset - trust - these key concepts can bring about the economic inclusion of a great number of companies and individuals that the global economic crisis threatens to exclude from economic and financial systems. This is the important goal to implement green issue and environment protection hand in hand with processes optimization, cutting costs and innovations.

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