

MAY 2011 - CANVIRONMENT WEEK 2011 LAUNCH - RINGING THE SUSTAINABILITY BELL METPACK ESSEN GERMANY



Shri Harish Chander Ringing The Sustainability Bell



Dr. Gerhard Eschenbaum Deputy Executive Director
Dusseldorf Chamber Of Commerce And Industry

MAY 2011 - EMPAC CHALLENGE AWARD METAL PACKAGING FORUM HOSTED BY EMPAC AT INTERPACK GERMANY



JUNE 2011 IPA INNOVATION AWARD



LAUNCH BY NAMPK AND COLLECT A CAN AT CAPE TOWN 18TH - 20TH NOVEMBER 2011



Atit Bhatia with Dominique Mann Miss Earth
South Africa 2011



ABOUT CANVIRONMENT WEEK

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SANJAY BHATIA,
Chairman,
Canvirement Week &
Managing Director
Hindustan Tin
Works Ltd

Sustainability is the key word on which the foundation of HTWL has been laid. Be it the Metal Cans we manufacture or the social responsibility measures we take, sustainable solutions is what we look for. Building on this philosophy, the Launch of Canvirement week has been initiated, aiming to spread awareness about the exclusive sustainable packaging solutions it offers and also encourage individual and organizational participation.



ANTONIO HELIO WASZYK,
Chairman and
Managing Director,
Nestle India Ltd

Long-term sustainability and environmental conservation are inter-linked and must be priorities for both business and society. Nestlé Create Shared Value business philosophy means that we do business based on sustainable preservation of the environment, constantly finding ways to increase efficiencies and to reduce waste. I am very happy that Hindustan Tin's Global initiative of celebrating 'canvirement week' in November is making effort towards sustainability and recognising the need for the welfare of rag pickers in India who are involved in the recycling operation. I wish the event a huge success"



KEITH PEARSON,
President,
World Packaging
Organisation

The winds of changing are fanning the attitudes of many people around the world and the Canvirement Week initiative is a timely opportunity to challenge individuals and communities to live more environmentally responsible lives and for the global canning industry and its partners to unite in highlighting the need for companies, Governments and individuals to unite in dealing with the moral issue of leaving a legacy. Saving our planet is a theme worth planning and working for.

By making the initiative theme and activities revolve around youth, the Canvirement Week is geared for fun and exciting activities that facilitate learning and sustainable living. Encouraging people to understand that collectively "we can" and as individuals "I can" make an impact in infusing life and energy into making sustainable living a reality. It has been most encouraging to note that many companies around the world have caught the vision of supporting this global movement that is well thought out and meets the environment as well as social needs of society. Working with the Rag Pickers is a wonderful way of transforming people's lives and is a genuine desire to facilitating the rehabilitation of many people and hopefully have families and communities achieve a "rags to riches" experience. Canvirement Week is a great way for businesses to reach out into local communities and as the saying goes there needs to be contact in order to make an impact.

The World Packaging Organisation's theme is "Better quality of life through better packaging for more people" and without doubt Canvirement Week fully supports this vision and we wish the organisers, participating companies and participants every success.



ATIT BHATIA,
President,
Canvirement Week &
Sr. VP Hindustan
Tin Works Ltd

Testimonials

I feel very pleased to bring to you the second in the series of this global sustainability campaign focusing on the eco friendly nature of metal cans. We have had a very successful year and have received world acclaim for Canvirement Week in 2011; while delivering a fantastic and a promising story for the global metal packaging industry. Each Canvirement member has come up with very innovative and out of the box ideas to promote the industry and has raised the global benchmark to promote a packaging material. We wish to drive this campaign forward with full enthusiasm and spirit to promote our industry and position metal cans as the sustainable package of the future. We promise to be back next year in 2012 with a much more exciting and fun filled Canvirement Week.



RAKESH KACKER
Secretary,
Ministry of
Food Processing
Industries

We are very happy to associate and be a part of CANVIRONMENT WEEK. A global movement initiated by Hindustan Tin Works for the upliftment of the lives of ragpickers. We urge the industry to have similar programmes which we are happy to support. We congratulate hindustan tin works and wish hindustan tin works all the success. Packaging plays an important role in preservation, protection, market appeal, consumer attraction of food. packaging ensures that the food reaches the consumer in clean and unadulterated dependable condition in terms of quality. As a result, packaging is an important component of the processed food sector. At the same time it is important that the packaging industry focuses on the principles of reduce, reuse and recycle. sensitivity towards sustainability would be an important issue that would be facing industry in general. in view of the same i am glad that hindustan tin has taken a global initiative of celebrating 'Canvirement Week' in the month of november 2010 in order to highlight recyclability and environment friendliness of tin packs, promotes processed food and also help the rag pickers, who are an important link in the recycling chain, to lead a better life.

I convey my best wishes for the event to be a grand success so that this model can be replicated across the packaging industry.



N C SAHA
Director,
Indian Institute
of Packaging

I am extremely happy to note that after having a landmark success of the launching of 'CANVIRONMENT WEEK' during 10th- 17th November, 2010 by an Indian packaging industry for the first time in India to commemorate the 200th birth anniversary of the father of canning, Mr. Nicolas Appert, this particular movement has now spread over across the globe. It is also heartening to note that this movement has stimulated many more countries/organisations who are coming forward to support this movement which has got a noble mission of "sustainable packaging". Most importantly, this could be an example in the packaging world that a movement, initiated by Hindustan tin Works, an Indian Packaging industry with the support of all concerned stakeholders has been able to get the recognition globally within a period of two years. I am confident that the entire packaging community will be highly excited by this movement and all the stakeholders related to packaging will work together towards common goal for the development of "sustainable packaging". On behalf of Indian institute of packaging, may I take the privilege to support this movement and wish for a Grand success.



KALAYAN GANGULY,
President,
United Breweries Ltd

In an increasingly enlightened business environment where sustainability and responsible growth are key drivers, Canvirement Week by Hindustan Tin Works is a timely and relevant initiative. Environmental consciousness and green initiatives are no longer peripheral activities which corporate houses used to indulge in. In fact, sustainability is the cornerstone on which future business growth is dependent. At United Breweries Ltd., we have always recognized this. We believe in pioneering and supporting initiatives that minimize the impact that our business has on the planet. We believe that the society that we are currently a part of and generations to come, have a right to a clean & environmentally stable planet. Many of our first in category initiatives like ground water recharging, bottle and can recycling and reforestation are born out of this belief. I would like to once again take this opportunity to wish both, the organizers and participants, of Canvirement Week 2011, all success, and a healthier and better planet to live on.



MONICA HIGUERA
Editor,
The Canmaker
Magazine

Metal packaging, the saviour for wasted food. We live in a world in which one billion people face starvation yet huge volumes of the food produced are wasted. This shocking situation has been highlighted by the fact that some 1.3 billion tonnes of food is lost each year throughout the global food chains. As much as 50 percent of food is lost after harvest and before it reaches the consumer. In developed markets retailers and consumers also waste huge volumes, some 89 million tonnes in Europe alone. Yet the solution to this problem has been available for more than 200 years: metal packaging. It is a solution that offers future generations a sustainable means to overcome these appalling losses. By using materials that do not degrade and are easily recyclable, metal packaging provides the best means of preserving nutritious foods over long periods of time without a need for refrigeration. It is also robust and light, making it ideal for challenging shipping and warehousing conditions. It is therefore a means of packaging that is both easy to use, store and transport with the lowest impact on the environment. The organisers of Canvirement Week should be applauded for continuing to bring this message to a global audience, and The Canmaker magazine welcomes the opportunity to support their activities. It is only by repeating this message that it will eventually be understood by those who have the power to encourage the use of metal, the best packaging option.



ASHWANI BHARGAWA,
Managing Director,
Micro Inks Ltd.

It is heartening to know that Hindustan Tin Works Ltd has continued the initiative of CANVIRONMENT WEEK started in 2010 and we feel very happy to be associated with this initiative. The rapid economic developments of the past one decade have thrown up new challenges to people, society and industry. Proper awareness and timely action about the adverse impact of these changes on the environment is one such challenge which needs to be dealt with on top priority. Nothing is more laudable than voluntary action on the part of industry. Environment concerns us all and it is our collective responsibility to protect it. Improvement in the economic situation in our country will result in increased consumptions, which means increased production. Rising levels of consumption and production will result in increased waste generation. And we will have to find newer and more innovative solutions to deal with this waste. However, the first and foremost step in this direction is creating AWARENESS amongst the public as well as government and industry. CANVIRONMENT week is a very positive step for creating and spreading this kind of awareness. I congratulate the organising team of CANVIRONMENT initiative and hope that this initiative gathers further popularity in the coming years.

ABOUT CANVIRONMENT WEEK

A unique worldwide initiative, Canvirement week aims at not just educating but taking action as well. For the first time ever, Can makers and Brand owners across the world are coming together to create an 'United Global Metal Can Recycling Movement.' Our goal is to make a significant and sustainable impact by creating an all round awareness about the exclusive benefits of usage of Cans, the vital one being its eco-friendly nature.

The whole event revolves around our passion and perseverance to mobilize the cause, 'Save our Planet'. By building a strong and united Global force, which will lay the foundation to create an Environment, which is Canvirement friendly, is how we propose to achieve our goal. A major effort to support the Global recycling system and the long-term sustainability of the metal cans are the key features of this initiative.

The seeds for the birth of the event were sown in the small conference room of Hindustan Tin Works Ltd (HTW). On completion of 52 yrs of HTW, and on the occasion of the 200th Birthday of a Can (The Can was invented in 1810) the top management team got together for a brain storming session to outline the most effective ways of contributing to the cause 'Save our Planet', they realized the need to go Global and hence Canvirement Week was born.

10th - 17th November 2011 has been marked as Canvirement Week for the World and we have received confirmation from 11 major Can Makers from 11 different countries from 5 continents to conduct parallel activities in their countries most of which we are business partners to major FMCG companies of the world.

The names of these can makers are:

- Hindustan Tin Works Ltd** – India, **Hanil Can Company** – Korea, **Huber Packaging Group** – Germany, **Hoffmann Neopac** – Switzerland, **Lageen** – Israel, **Envases** – Dominican Republic, **Brasilata** – Brazil, **Ardagh** – Netherlands, **Emballator** –Sweden, **Nampak** –South Africa, **ASA** – Italy



MUSICAL COMPETITION

Music knows no boundaries. It is the language known to all. What else can be better way of reaching out to the people, other than music! Bands from various colleges and schools will be invited to create music out of cans. Based on the 4R's of RECYCLE AND REUSE, this high-energy musical event, intends to emphasize the importance of Recycling and conserving the environment. The event will be judged by prominent personalities from the music industry and the Canvirement week committee. The final winner will be awarded the title 'Canvirement Week Talent of the Year 2011'. Cans are fun and cans are 100% recyclable!



MAHINDER BHATT,
Winner - CanCussion 2011



HIGH SCHOOL PAINTING COMPETITION

The future of the planet lies in the hands of young budding school children of today. It is therefore very important to nurture their nature from the beginning in order to mould them into responsible global citizens.

The painting competition is an initiative aiming to do just the same. Here we are trying to provide a platform for these youngsters to showcase their talent and also express their views on recycling.

Top three entries from every school will be entered into the competition and the winner will be awarded the title Canvirement week student of the year.

With this effort we hope to do educate these children and in turn secure the future of the planet.

CANILICIOUS

'Canlilious' food canter activity aims to spread awareness about the 'Ready To Eat' benefits of packaged food. The food canter activity will introduce consumers to recipes made out of canned food and make them aware that can packaged food is fresh, nutritious, tasty and has long shelf life. A famous chef will prepare one hot and one cold dish. This activity is planned at strategic locations in New Delhi, keeping in mind the changing consumer lifestyle and time constraint which every person is facing.



SUSTAINABLE DESIGN WORKSHOP

An activity that is smaller in range but will have a stronger impact! Yet another platform for youngsters to showcase their talent and give out the message of recycling, sustainable design workshop targets National Institute of Design, Ahmedabad in 2011.

Respect the environment by reducing, reusing and recycling is the theme of this event. Students of the lifestyle and accessory department will be encouraged to bring out the creative talent in them and make different installations with cans & scrap

Unique products require unique packaging:

Being a pioneer that sets the industry benchmarks, Kingfisher has consistently striven to find new and pioneering product innovations to satisfy consumer needs. To deliver the unique taste of brewery freshness to the consumer, to his home or on-the-go, the company created a one-of-a-kind product - 'Kingfisher Draught'. And to deliver this product in the most desirable way, Cans were the chosen format. In distinctive, striking yellow 500ml packaging, The Kingfisher Draught Can has created a whole new sub segment and a cult consumer franchise. The success of this product wouldn't have been possible without the can format. 'Kingfisher Fresh' is strong draught beer in a can. This product has also met with significant success in the markets where it has been launched.

Versatility of shapes, sizes, textures:

Cans are the lightest-weight beverage container, enabling savings in shipping and handling costs through the supply chain; and the average post-consumer recycled content of an aluminum can is 44 percent the highest recycled content of any beverage container. Kingfisher now comes packaged in two Can sizes - 330 ml and 500 ml. Both SKU's help in completing and complementing the Kingfisher pack size stable, while

providing the consumer with a choice of handy alternatives, depending on his need state and convenience choice. Not just that, the can as a packaging format allows the brand to boldly experiment with size and 'tactile' feel, grip and shapes. The forthcoming launch of Kingfisher Ultra Cans - the Emperor of Good Times, will deliver to consumers a super premium experience. These cans are being launched with a specially textured finish to the can surface to deliver Kingfisher Ultra's distinctive and stylish imagery. This Can innovation is an alcohol beverage industry - first achievement in India. In due course, Kingfisher Cans will also take a sleek and slim new avatar for the 330ml configuration.

Cans as the brand's creative canvas:

The Kingfisher brand has been built on a strong foundation of unique marketing and advertising activities. These marketing initiatives are primarily led by mega-associations with sport, fashion, food and music events, which bring alive the Good Times spirit for our consumers. To celebrate these brand associations, Kingfisher also uses its product packaging as a key reminder to consumers. The Kingfisher Can lends itself beautifully to leverage these brand associations, by becoming the canvas to deploy

unique creative renditions on the can surface. Limited runs of these unique cans are made to celebrate Kingfisher's association with IPL, F1 and The Great Indian Oktoberfest.

Cans: A lighter carbon footprint:

At United Breweries, we see our packaging containers as opportunities to deliver a great consumer experience with a lighter impact on the earth. The fact is that packaging can account for more than 40 percent of the carbon footprint of a packaged product because of the materials that go into it and the distance it travels to and from our breweries. Cans are lighter, have a lower carbon footprint and are the most recycled content of any beverage container, and the company is doing its best to promote this sustainable and eco-friendly packaging format to the hilt.

The can as a packaging option is ideal for Kingfisher. Its low weight and high strength makes it easy to ship and store. Cans provide the most optimum protection for the beer; from impurities, bacteria, moisture, light and odours. As an eco-friendly packaging material offering high recyclability - any number of times, and without quality loss, Cans are an ideal format which allows the Kingfisher brand to be infinitely creative, and make the Good Times great for all its consumers.

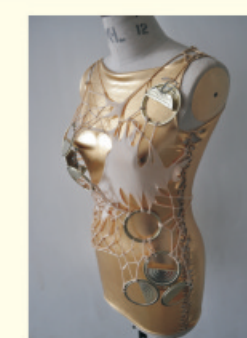
GLOBALLY CANVIRONMENT WEEK 2011 INTERNATIONAL PARTNERS HAVE SO FAR PLANNED VARIOUS ACTIVITIES:

- The Italian can maker ASA plans painting competitions for school children in Italy
- Empac, representing the European metal packaging industry plans to donate T-shirts promoting Canvirement Week to under privileged in Belgium in association with HTW
- Lageen Israel shall celebrate Canvirement in parallel to Hanukah and have an engagement program with children
- Huber Packaging, Germany is providing intellectual support to the campaign in Europe
- Nampak and Collect a Can, South Africa in November will be running an art completion with tertiary students of various art faculties across Gauteng where students will have to design a novelty can to mark the annual commemoration of Canvirement Week. It is hoped that by using art as a creative platform and by leveraging the upcoming Green Expo at Cape Town (18th - 20th Nov 2011) by exhibiting and hosting a discussion forum the message of recycling cans will be communicated to a broad audience with the aim of increasing awareness among South Africans on how recyclable cans are.
- Brasilata in Brazil will inaugurate a metal can recycling center in Brazil during the week
- Ardagh in Norwhich UK has partnered with Open Academy to create art out of cans.

Environment Initiative of the Year 2010 Award at the IND SPIRIT 2010



AUG-2011 SUSTAINABLE DESIGN WORKSHOP - NATIONAL INSTITUTE OF DESIGN-AHEMDABAD





SANJAY BHATIA
Chairman,
Canvirement Week &
Managing Director
Hindustan Tin Works Ltd.

THE CAN INDUSTRY – SETTING A NEW GREEN AND INNOVATION AGENDA !

Mother earth is the only planet we have. Global warming can lead to irreversible changes in the delicate balance that exists in the planet's climate and life systems. It is a growing crisis with large scale implications on mortality, health, economics and security. We have still not reached a point of no return and the most dangerous climate changes can still be avoided. It is action on the ground, which makes all the difference in achieving our goals. In this, each one of us has a role to play as a symbol of responsible society.

In the world that we live in today the word 'Green' has become synonymous with sustainability and any thing that is good for environment. Hence the term green packaging has become necessity for today and tomorrow. If we have to call any packaging green, then its raw material must come from a sustainable source, the conversion process should consume the least resources and also mitigate the environmental impact of such consumption, the finished package again must consume the least resources and as critical as the others it must have an eco friendly method of disposal. One measure to look at this is the life cycle assessment study for any packaging. This study reports the sum of all impacts as one number usually equivalent to

carbon emissions thereby assisting the consumer in arriving at an informed choice. LCA studies are at nascent stage in India. The scope can vary from a) cradle to gate b) cradle to grave c) cradle to cradle etc. Green packaging therefore is no longer a choice but the only way to ensure survival both that of our business and our planet.

Given this backdrop, therefore recycling of packaging waste has become a necessity in our society as it has direct impact on the environment, our well being as well as of future generation. Recycling one tonne of steel can save 1.5 tons of iron ore, 0.5 ton of coking coal, 1.3 tons of mining waste and up to 1800 kg. of carbon dioxide emission. Metal cans have unique benefits being 100% recyclable infinite number of times without loss of their essential properties. This is the key feature since metal packaging represents less than 1.5% of all steel products manufactured world wide. Metal scrap has a high economic value which, in turn, makes the recycling process more sustainable. In the European union the rate averages 70%, in Germany and Netherland the rate is an even more remarkable which is 93%. What is required is to implement effective polices through promotion to local authorities, schools and at retailers in order to recover this type of container after use.

More than two centuries old steel food can is more than ever relevant to today's word. Its longevity, robustness and ability to preserve food for long periods of time, along with its ease of recycling make the steel can the best packaging for helping us to contain our impact on the environment.

After the grand success in 2010,

canvirement week 2011 was launched in Germany during Metpack/Interpack in May this year. It is a world wide initiative that aims to educate and take action to raise awareness about the sustainability of metal cans. This is an excellent global initiative with positive response from companies in 11 different countries located in 5 continents who are speaking with one

Voice to promote sustainability of metal cans and leveraging on eco friendly nature of cans. We are also indeed thankful to our other partners without whose support this movement would not have achieved this scale and they are Ministry of Food Processing Industry Govt of India , Ministry of Environment Govt. of India, World Packaging Organization, European Metal Packaging Association (EMPAC), International Packaging Association (IPA), Indian Institute of Packaging , Tinline Promotion Council, Metal Container Manufacturers Association, United Breweries, Micro Inks and Tinline Co. of India Ltd.,

Finally, our vision is to create a prosperous, but not a wasteful society, and an economy that is self sustaining. Individual efforts may seem like drops in the ocean. However, the impacts from the positive changes from these efforts in consumption patterns by millions of people will make significant contribution towards a more climate friendly Mother Earth. Let us do our bit now for our city, country and our environment. As Mahatma Gandhi once said "Whatever you do may seem insignificant to you, but it is most important you do it" .



Endless Possibilities with Cans



Mr. Saket Bhatia
Sr Vice President
Sales And Marketing
Hindustan Tin Works Ltd

A PORTABLE WAREHOUSE / FIGHTING FOOD WASTE

Hindustan Tin Works presents a special feature on the usage and benefits of tin cans...

When it comes to food and beverage, the idea is to design a packaging medium that shall keep the product fresh and safe for a long duration, which is convenient to use so that consumer can enjoy this gift of nature throughout the year. Tin can offers the longest duration of shelf life sustaining itself throughout the rugged distribution chain without the need of any cold chain. Hence it is shelf stable i.e. it can be stored at an ambient temperature throughout the life cycle of the product without refrigeration.

Although the buzz word in the entire country today is to develop and heavily invest into cold chain, we believe it is a far fetched dream considering that India is an energy deficient country and to preserve food canning is more economical as well as environment friendly. It also offers the best barrier for moisture, oxygen, sunlight, bacteria, rodent, etc. making it the most safe and reliable pack.

Packaging is the soul of any product and acts like a silent salesman leading to an impulse purchase by the consumers and tin can offers a distinct advantage to differentiate itself by excellent printability and innovative shapes and convenience of easy opening.

Canning is generally done right at the source of the produce with highly controlled parameters of cooking / heating / pasteurizing the product so that it remains fresh as well as nutritious when opened for consumption. Certain studies by industry experts in the developed countries clearly show that the energy saved to retain the freshness of the product in canning vis-à-vis cold chain is almost 70 percent. It should also be noted that since the product is properly processed before canning during the season itself when the nutritional content of the produce is at its peak.

Canning of mango pulp / coffee / ethnic vegetables are classic examples of processing and packaging of the high levels of agricultural produce by India, which is exported through out the globe in cans.

Every year India loses more than 50 percent of its produce of fruit and vegetable which can be preserved by this excellent method of canning which does not even require refrigeration / cold storage through out the distribution chain.

Canning was a process discovered almost 200 years back and is highly popular world wide even in the developed countries. However, in India unfortunately still the canning technology needs extremely highly level of upgradation compare to developed countries like US or Europe.

The Ministries of Food Processing should regularly take on campaigns creating awareness of the benefits of processed food to the general public as the perception in India about this is still not positive. This would become the major driver of processed food consumption in India and eventually reduce food waste.

With the increasing awareness on hygiene as well as reliability on the product the demand for packing is increasing in double digits particularly as we see a shift of demand from loose products to packed products. Water, milk, juice are classic examples of the same and the trends are very clear of what the consumer really wants!



PARAS BHATIA
Sr. Vice President
Hindustan Tin Works Ltd.

DOWN GAUGING: A GLOBAL PERSPECTIVE

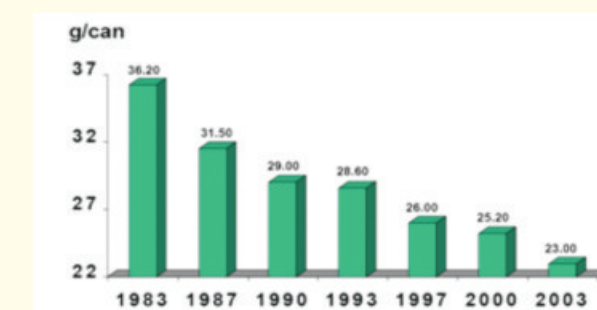
The continuous flux of international finances has increased the stresses on can makers' margins. Since the Tin Plate costs form over 60% of the cost of a can, this stress can be alleviated with aggressive down gauging of the base metal.

Any down gauging project is fraught with many dangers: handling, filling, processing and transportation trails will have to be undertaken to ensure that the can fulfills the canner's needs. The lower gauge sheets may present problems in the existing coating and printing lines. The body maker may have to be tweaked to handle the material. The can must be tested at each processing station such as flangers, beadlers, seamers, elevators and even palletisers. Similar trails will have to be done at the filler's end.

A major bottleneck in the adoption of uniform down gauged standards across the world is the availability of materials. For example, a leading South African can maker continues to make cans of higher thickness while his subsidiaries in Kenya and Nigeria have down gauged successfully. It is therefore an economic decision. In an ideal world where tariff barriers are brought down for raw materials, there will be a greater push towards using materials more economically and result in all round upgrading of technology of manufacturers of the base metals such as steel and aluminium.

Some examples of successful down gauging projects:

1. Batchelor's Processed Foods: Material thickness reduced and 2 piece processed food cans introduced. Check: www.batchelors.ie
2. Soudronic & Rasselstein: new line to produce cans of 0.10mm introduced. These cans have a smaller carbon foot print and therefore are environment friendly. The cans retain the strength despite being paper thin. Check www.soudronic.com
3. Nampak Nigeria: Small ointment cans of 4g capacity down gauged from 0.21mm to 0.14mm. This necessitated a change in manufacturing technology and serious re-engineering of sheet fed presses. Tinlets are made at 2500cpm on these lines.
4. Weight of Steel beverage cans over the years (source: Rexam)



THE BENEFITS OF DOWNGAUGING

- The product cost is reduced- the consumer wins!
- The can maker gets higher yield on raw material- the producer wins!
- Less energy per SKU used-from ore to recycle bin we all win!

Tin/Steel Recycling.

- Every ton of steel recycled saves 2,500 pounds of iron ore, 1400 pounds of coal and 120 pounds of limestone.
- Steel is one of the world's most recycled products. In fact, steel is 100% recyclable, which means its lifecycle is potentially continuous.
- Making steel from recycled cans uses 75% less energy than when producing steel from raw materials.

Aluminium Recycling

- Making cans from recycled aluminium saves 95% of the energy required to produce cans from virgin material.

- Recycling one aluminium can saves enough energy to run a television, or operate a computer for three hours.
- 99% of all beer can and 97% of all soft drink can are made of aluminium.
- The average aluminium can in the U.S. contains 40% post-consumer recycled aluminium



N C Saha,
Director, Indian Institute
of Packaging

TINPLATE CONTAINERS A SUSTAINABLE PACKAGING MEDIUM

It is well known fact that about 60 percent of Packaging materials are used for the packaging of processed foods, followed by pharmaceutical products for about 20 percent, cosmetics and toiletries for 5 percent and the balance for other household, engineering and electronic goods etc. Due to this fact, quite often, it is said that food and packaging sectors are complimentary to each other. In fact, the Indian packaging sector has to continue with the 15 percent annual growth so that this sector would be able to support the entire food factory of the world.

India is considered to be the food factory of the world due to its large production base for various commodities like cereals, pulses, fruits and vegetables, fish and milk products. Incidentally, all these food products, either in fresh or in processed condition, generally perishable in nature. Processed foods are very much susceptible to get affected by the climatic factors and as well as by micro-organics like mould, yeast and bacteria.

In order to store these food products, either fresh or in processed form, packaging plays an important role by way of protecting the products against damages during handling and transportation, preserving the processed foods by way of offering barrier properties and so on.

Over a period of time, the constant growth and development of packaging technology has enabled to develop a large variety of packaging materials like flexibles, rigid and semi rigid containers. Among the flexibles, there are various options like plastic based multi layered structures, either in the form of laminate or co-extruded structures. But the most important aspect is considered to be the functional properties of the packaging materials in terms of their moisture barrier, oxygen gas barrier, seal strength property, tensile strength and elongation etc. However, these packaging material has got a limited shelf-life. Due to this, it is always preferred to select a rigid packaging material like glass, plastic containers, or metal containers. Metal containers, mainly, tinplate containers are considered to be the most preferred packaging medium as this particular packaging medium scores in excellent in all attributes in terms of mechanical strength and formability, amenability for excellent printing and graphics, excellent barrier properties, retorting and providing long shelf life to the product and above all, eco friendliness.

Even in terms of cost effectiveness, considerable progress has been registered through light weighting and lower coating of the media in fact, over 35% weight reduction has taken place over the last 30 years for similar usages.

Revolutionary changes have also occurred in the food cans in terms of all functional properties and as well as towards eco-friendliness by way of reduction of tare weights. Tinplate cans provide ultimate ease of re-cyclability. Food or drink Cans can simply be converted into the steel production furnace without prior stripping or treatment. It is reported that at present 25% of every ton of steel produce comes from scraps such as metal Can.

If an electric furnace is used, 100% recycled material can be used to produce new steel. In addition, the additional materials used in the 'Can' are the internal lacquers, coatings and all printing inks which are burnt into the furnace and reduce further energy cost.

While considering the sustainability, the world is looking for packaging materials which can be completely recycled and recovered, so that there is no loss of resources. In other words, there will not be any scarcity of resources for the future generation. Keeping in view of this aspect, tinplate containers are found to be the most suitable packaging which complies with '3 R' concept and thus, it is considered to be most sustainable packaging material.



PHILIP BUISSERET
Managing Director,
APEAL, The Association
of European Producers
of Steel for Packaging

STEEL FOR PACKAGING, AN ENABLER FOR SUSTAINABILITY

Sustainability has risen swiftly up the world agenda in recent years. Consumers, governments and industry recognise that we must look to reduce our global footprint in every area of our lives. As the world demands solutions

for a sustainable future, the sustainability performance of steel for packaging can provide an answer. Steel packaging offers brand owners, retailers and consumers a strong performing product they can trust, while also enabling them to demonstrate their active role in building a sustainable society.

The steel industry has a long standing tradition in sustainability, having been committed for many years to reducing its use of natural resources and its impact on the environment with significant results. The industry has also made significant efforts in reducing CO2 emissions, limiting its use of fossil fuels, boosting recycling levels and promoting the conservation and eco-efficiency of steel packaging. Moreover, steel is the world's most recycled material and this is made possible in a particularly easy and cost-effective manner. 72% of steel packaging is recycled in Europe (2009 figures).

Finally, in a context of constant search for increased environmental and economic efficiency, canned food has demonstrated that it stands out as an optimal packaging solution, being an energy efficient means of food delivery, while upholding safety, conservation and nutritional value.

Thanks to the efforts of the steel industry as a whole and the intrinsic qualities of the material, steel's sustainability performance ticks all of the boxes for an optimal packaging solution.

The steel industry : a long standing tradition in sustainability

For many years, the steel industry has been concerned about its use of natural resources and its impact on the environment. The industry has made significant efforts in reducing CO2 emissions and limiting its use of fossil fuels, boosting recycling levels and promoting the eco-efficiency of steel packaging. Its sustained recycling continues to reduce the consumption of raw materials and energy.

The industry has achieved a dramatic reduction in CO2 emissions per tonne of crude steel output which are now 50% lower than 40 years ago. It is investing considerable effort to be able to further reduce its environmental footprint.

At the same time, the industry has been continuously optimising the end product - steel packaging - allowing it to become ever lighter. The weight of steel food cans has been reduced by 40% over the past 30 years thanks to the development of new steel grades. This means cans use less raw material and are lighter to transport - all of which have a positive impact on the environment.

The steel industry's commitment to research and

innovation means that steel packaging enjoys a sustainability performance that meets the needs of brand owners, retailers and consumers alike.

Steel production, an energy efficient process

The steel industry has focused on reducing its use of energy and resources for many years, and with significant results.

In the past 50 years the fossil fuels needed to produce one tonne of steel have been reduced by 40%. To optimise use of energy, steel producers use the most sophisticated energy and gas management systems in their processes. In today's steel production, gaseous by-products are used as fuel, replacing primary energy; and a high percentage of thermal energy in cooling water, exhausted gases and residual products are recovered for use elsewhere.

Steel, the most recycled material

Steel is the most recycled material for food packaging. In Europe, 72% of steel packaging is recycled. Placing steel far ahead of other packaging materials such as plastic, cartons and glass, which demonstrate rates of 30%, 34% and 67% respectively

Every tonne of recycled steel packaging saves 75% of the energy needed to make steel from virgin material. In addition, each item of recycled steel packaging saves almost twice its weight in CO2. So the more steel is recycled, the more CO2 emissions are reduced. Around 2.5 million tonnes of steel beverage and food packaging is recycled in Europe, which corresponds to a 49% reduction of CO2 emissions into the atmosphere.

Canned food : a top performer in Eco-efficiency

"In today's open market where the supply of foods is secured throughout the year, amongst the systems studied, canned food is a top performer in terms of eco-efficiency"

Toon Ansems, Project Leader, TNO - Environment, Energy & Process Innovation

Eco-efficiency describes the combined environmental and economic performance of a product. It enables more efficient production processes and the creation of better products and services while reducing resource use, waste and pollution along the entire value chain.

Two major studies illustrate the eco-efficiency of canned food. One analyses the environmental impact and economic costs of preparing a meal with different packaging systems. The other illustrates the energy efficiency of supplying food in cans from harvest to the end consumer.

Together, they demonstrate that canned food stands out as one of the best performing packaging solutions offering consumers a good product that they can trust, while also offering society the optimum solution in terms of sustainability.

Eco-Efficiency of canned foods: best performance combining environmental profile & cost benefits

A study undertaken by LCA and food research institute TNO looked at the sustainability of the packaging system from a holistic perspective. It measured the global impact of both the packaging and the product at each stage of their lifecycle. The Dutch market was taken as the basis for the study.

Carrots were chosen as the example as they are available in a wide range of processing and packaging combinations.

Seven food packaging/processing combinations were compared amongst which fresh, bunched carrots, frozen and canned. Each step of the product lifecycle was considered separately (from farm to fork, and including recycling).

In a situation of an open economy (including imports and exports), canned carrots are, amongst the alternative packaging systems analysed, the best performing product in terms of eco-efficiency, considering the combined environmental impact and cost.

A responsible choice in today's challenge of energy efficiency

A study conducted by Scientific Certification Systems (SCS) in California, comparatively assessed the energy consumption of fresh, frozen and canned food delivery systems, quantifying the energy requirements at each stage from farm to fork.

Two delivery formats - bulk and portion servings - were compared across a series of packaging/processing combinations including bulk refrigerated product (e.g. green beans, broccoli, asparagus) in coated cardboard; frozen products in different packaging formats; canned ready meals and canned products.

The various stages included growing/harvesting, food processing, production of sales & transport packaging, transporting from field to end consumer, storing for wholesale and retail distribution, as well as home storage and food preparation at home.

Canned meals: the most energy effective method for delivery

Taking the full process - from farm to fork - into account, the study clearly reveals that canned foods offer the most energy effective method for product delivery. The most energy intensive methods, frozen bagged and boxed product, require over 100% more energy from farm to fork than bulk and canned meals.

Why is canned food such an energy efficient method of food delivery?

Firstly, in terms of food processing, the energy inputs for canning are significantly less than those reported for frozen goods. Secondly, due to its compact and stackable container designs, it enables more food to be transported in limited volume with less transport packaging. Thirdly, being stored at ambient temperature, canned food is totally independent of refrigeration.

In conclusion

As the world demands solutions for a sustainable future, the sustainability performance of steel for packaging can provide an answer. Steel packaging offers brand owners, retailers and consumers a strong performing product they can trust, while also enabling them to demonstrate their active role in building a sustainable society.

Thanks to the efforts of the industry and the intrinsic qualities of the material, steel's sustainability performance ticks all of the boxes for an optimal packaging solution.



Gordon Shade
CEO Empac

A BRIGHT FUTURE FOR METAL PACKAGING

Today, society across the globe is more and more demanding of its policymakers. This is especially true when we mention the E (environment) word. Millions of pages

have been written on the subject as we all try to come to terms with a world which faces a growing imbalance between basic resources and consumer demand. Additionally, populations are concentrating in urban areas where the logistics of supplying food in the right quantities and quality takes on an even greater significance.

Against this background, it is worth listing the characteristics which are now governing the choice of packaging materials:

- Protecting contents whatever the logistic challenges
 - Minimising the impact on the environment
 - Reducing food waste in a responsible manner
- For the above 3 key criteria the can is a perfect solution and this is why European Metal Packaging (Empac) is focusing on these in its communication programmes

PROTECTING THE CONTENTS WHATEVER THE LOGISTIC CHALLENGES

What other material can rival metal in protecting product contents? The answer is easy...NONE...with its extended shelf life providing full protection against light, oxygen and bacteria metal is an ideal solution for modern lifestyles. Take canned fruit and vegetables as an example, harvested, selected, cleaned, then cooked quickly at high temperatures and sealed in airtight cans. This streamlined process takes but a few hours from harvest to can keeps nutrients IN and impurities OUT while preserving the contents for many, many months to come and providing consumers with healthy, fresh products.

MINIMISING THE IMPACT ON THE ENVIRONMENT

This is about minimising the use of precious resources and again, the can is a leader through the strengths of its recycling. We read so much about recycling and recyclability these days that it is sometimes easy to forget the basic essentials - so let's remind ourselves.

-Metal can be recycled and re-used indefinitely with no degradation in quality - contrast this with other packaging materials which, when recycled, are frequently obliged to be used in less demanding applications- so called "downcycling".

-Most importantly, recycling reduces energy consumption significantly and therefore CO2 emissions. So achieving high levels of recycling is a very important action in the fight against climate change and our Empac CO2 calculator confirms this.

-Recycling steel again and again conserves natural resources used to make it, i.e. iron ore and coal. It is very easy to recycle all metal because of its adaptability to a wide range of collection systems from mixed household waste to multi-material door-to-door collection systems, can banks or magnetic extraction. The recycling infrastructure is in place to capture this valuable material.

-Aluminium and iron are the third and fourth most abundant element in the earth's crust but our industry through its recycling programs ensures an extended life.

-Finally, in Europe we walk the talk - cans are the recycling champions of packaging with a record 71% recycled in 2009.



Keith Pearson,
President,
World Packaging
Organisation

IN ORDER FOR TRUE SUSTAINABILITY TO WORK THERE NEEDS TO BE A COMMITMENT TO MORALITY AHEAD OF MONEY

The global family has recently welcomed into its midst the seven billionth human being, with various celebrations taking place to mark this significant event. Population growth is a reality that is at the forefront of most

people's thinking today. It is estimated that by 2050 the global population will reach a staggering 9.1 billion people, Africa's population currently stands at 900million and by 2050 the African continent will be home to 1.9 billion inhabitants. These facts are challenging the way we live our lives and the way companies do business. This increased population will place huge pressures on global resources and the environment. Most Governments and strategic planners are acutely aware of the challenges approaching. Not only is the pressure bearing down on the environment but the global financialglobal systems are under pressure with people living longer, pension funds will be under duress to maintain paying benefits. Another pressure point is the growing trend in urbanisation, the world is experiencing a dramatic increase in rural to urban movement, and by 2050 there could be 70% of the world's population living in urban areas. These facts are challenging the way communities, governments and businesses conduct themselves. It is probably true to say that in recent times the world has been going through major changes, with the global financial crisis, the Arab Spring, ongoing terrorism, major starvation, threats of ongoing nuclear armaments manufacture, global population explosion and tribal wars. On the positive side there have been major moves in many countries that have resulted in wealth creation for many people and the expansion of the middle class, millions of people are joining this middle class in the developing world, resulting in significantly uplifting people's lives and at the same time improving country economies, and of course using more resources. The retail revolution is doing wonders for developing economies. With their large populations and will to succeed China and India are centres of economic growth.

The world faces some huge challenges in protecting resources in order to ensure that future generation's lives will have the opportunity of becoming better and not worse, serious responsible people are committed to "Saving the planet" from the plundering of the past. The U.N. reports that 32% of global fish stocks are overexploited or depleted, as much as 90% of large species have been fished out in the past half-century, overfishing is part of the problem. Fortunately there are major activities taking place in the field of aquaculture, this initiative is seen as genuinely protecting the future fish resources and creating meaningful sustainability. On an ongoing basis unscrupulous traders are apprehended for breaking the law in respect of trading illegally in seafood products.

This brings me to the point regarding honesty and integrity. In order for true sustainability to work there needs to be a commitment to morality ahead of money, there is no place for "Green washing". There are also challenges facing those who with the best intentions are working on developing score cards on sustainability. There is an enormous amount of effort, data collecting and additional staff required at arriving at a sustainable score and sometimes the results do not always provide sufficiently accuracy for strategic decision making. In order to bring some reality to the sustainable language The International Organisation for Standardisation is working towards

harmonizing the sustainable talk and many governments have implemented legislation or are working on rules to protect the environment, people. What may be easier to measure in relationship to measuring sustainability is to evaluate a company's genuine commitment to "Saving our Planet" to living and doing business the sustainable way.

It is a fact that all products have an impact on our world in some way or another. Information across the entire lifecycle of products needs to be taken into account, reviewing what raw materials are used, manufacturing processes, pollution, working conditions; distribution and disposal need to be taken into account. The challenge is that the global realities include resource utilization in developed and developing countries. It is anticipated that global middle-class spending in 2009 of US\$ 21.3 billion increase to US\$55.7 billion by 2030. This will move the proportion of Asian Pacific spend of 23% of world middle class spending in 2009 to 59% by 2030.

It is imperative that collaboration takes place between Governments and industries in order for global sustainability to have any chance of success. The population growth in Asia and Africa demands that nations and individuals receive technical support bolstered by meaningful sustainable education. Developing countries need to be open to the receipt of assistance from developed countries and developed countries need to have the will to form partnerships and invest in supplying sustainable related support and education. The Indian Government is proving that they care about "Saving the Planet" both locally and internationally. They are providing major support for the Indian Institute of Packaging (IIP), by upgrading the buildings and facilities and supporting packaging related education. In turn IIP are in partnership with the World Packaging Organisation and have successfully hosted three residential Global Packaging Workshops. One of the candidates from Africa gave testimony to the fact that the training he received at the IIP workshop forms the cornerstone of his packaging knowledge. Attendees attend these workshops from all over the world.

The Indian Government is setting a wonderful example of how collaboration can work, in December 2011 IIP is hosting a residential packaging workshop as part of the Indian Governments Indo-African initiative, the workshop is implemented by the Ministry of Processed Food Products and is sponsored by the Ministry of External Affairs. The Indian Institute of Packaging is fast becoming a major source of packaging education and through its educational endeavours is applying the world with knowledgeable packaging practitioners. The Indian Government together with their partners are showing that they care about "Saving the planet" and have a heart for the underdeveloped.

By the Hindustan Tin works Ltd initiating Canvironment week they have shown that committed industry leaders are capable of making an impact not only locally but also internationally. I was thrilled the other day to hear over a radio station in South Africa that Nampak the largest packaging company in Africa is supporting Canvironment Week. Canvironment Week is a well thought out strategy of reaching people, through communication means that are attractive to young people, using the arts to gain interest, buy in through interesting activities. Canvironment Week transforms theory into reality and meaning. I am convinced that targeting the youth of society is one of the most effective means of inculcating sustainable strategies and lifestyles that will pave the way for a nations genuine involvement in sustainability. Supporting the Rag Pickers upliftment is an honourable social initiative that once more adds reality to Canvironment's efforts of making a difference to society. The World PackagingPackaging Organisation's vision is to see "Better quality of life through better packaging for more people" and Canvironment Week makes contact with all levels of the global community in order to create an impact and lasting legacy that embodies the WPO vision.

Making reverse logistics systems right for cans

Existing reverse logistics systems for recycling offer key insights into how the canmaking industry should push for a fairer deal, says Antonio Teixeira

“Sustainability is definitely on the agenda in all human activities at the moment. And particularly in the case of packaging where post-consumer recovery – known as reverse logistics – is considered paramount.



Antonio Teixeira is chief executive of São Paulo-based three-piece canmaker Brasilata, and president of the International Packaging Association

This issue has been addressed in various ways throughout Europe since 1991, when Germany enacted its first Green Dot regulations. Subsequently other countries, under the guidance of the European Community, started to adopt similar policies.

At the beginning of this year, the Brazilian government issued its own federal law on recycling, setting ambitious targets for coming years.

It gave the entrepreneurial sector – the entire production chain, including packaging manufacturers, fillers, retailers and importers – one year to the end of 2011 to propose its own collective agreement.

Of course, the right thing to do for the canmakers in Brazil was to learn from the experience of European countries.

As a member and now, with great honour, president of the International Packaging Association (IPA), a worldwide association through which independent canmakers exchange information, I was appointed by the Brazilian canmakers to address the issue.

Thanks to IPA's European members, in November 2010 and May 2011 I was warmly welcomed by more than 20 European organisations that operated selection centres, recycling centres, energy recovery plants along with sector associations and also some government agencies.

I first visited Germany and Belgium because they have consistently achieved the highest recycling rates for metal cans.

We learned a lot from what we saw and from what we were told. This valuable knowledge will be very useful for implementing the Brazilian system. However, we also found procedures that, in our opinion, have an impact on metal packaging.

For example, in Germany where all post-consumer packaging is placed in the same ‘yellow bag’, I could see that metal cans are playing part of the reverse logistic costs of other packaging types.

Source - The Canmaker Magazine



JOHN NUTTING
 Editorial Director,
 Sayers Publishing
 Group

DOWN GAUGING TO ULTRA THIN CONTAINERS

Development programmes that enable canmakers to use ultra-thin 0.10mm tinplate for food cans have been completed. So where does the industry stand in taking it up, asks John Nutting

Three-piece cans made with tinplate as thin as 100 microns have been made in

limited volumes for many years, particularly in very small sizes for tomato paste. But it is only recently that attempts have been made to develop the processes necessary for making food cans in the larger more commonly found sizes.

A programme with this objective was started in 2008 by Rasselstein to demonstrate to customers and consumers that there was further potential for cutting the weight of steel packaging.

In collaboration with canmaking machinery manufacturer Soudronic and coating and decorating specialist KBA-Metalprint, the German steelmaker has been working alongside the development of canmaking and coating systems that make the goal possible.

The programme resulted from a meeting at The Canmaker Summit in 2008 when Dr Ulrich Roeske, chairman of Rasselstein, and Jakob Guyer, chief executive of Soudronic, realised that they were both working towards the same objective.

At a trade show in 2011 Roeske told The Canmaker that the technology was in place, and that along with the availability of the ultra-thin tinplate it was now possible to use it for both coating and fabricating the larger three-piece cans.

The challenge still however is to persuade food companies that there are benefits in the use of thinner gauges than are currently used. Clearly, from a canmaking viewpoint there is a strong sustainability message when the tinplate of a typical 450g 73mm diameter food can is reduced from 0.155mm to 0.12mm, a reduction of 22.5 percent, even more so when a 0.10mm open-top can weighs 28g compared to the typical 48g for a current three-piece can. But the overall cost saving is not as much as this, and it is further diluted after the filling and distribution process when the can reaches the retail shelf.

Food companies also need to know that a lightweighted can will meet performance requirements in the retorting process and when stacked several pallets high in a warehouse, a requirement that will only be satisfied after extensive pack trials.

But those are the most challenging requirements. A fish canner is said to be working with 100 micron (0.10mm) tinplate for small cans in which the rigours of the heat processing are much less demanding.

The news that such cans are being experimented with should be applauded by the canmaking industry, in that it provides an example showing that resource reduction is not just being talked about with metal packaging, but being put into practice.

Realistically, with three-piece food cans typically being made in gauges from 0.16mm to 0.25mm around the world, it is not likely that there will be an overnight conversion to the ultra-light material, but it shows the direction that is possible, one that had stalled in the food can business for more than a decade.

Roeske explains: “If we can provide a plausible case then it will have a greater impact. We are in discussions with a multinational for the production of material for three-piece food cans. Others are eager to try 0.10mm deep-drawn menu trays and my expectation is that the deep drawn tray is probably close.”

That's because the use of the ultra-thin material is easier to apply and test for drawn cans such as for fish products. “There's no reason for the three-piece food can to be the first. If we are talking about the common 450g can then there are issues related to stacking them in warehouses.”

Nonetheless some canmakers are already making three-piece cans using 0.12mm or 0.13mm tinplate. KBA has been testing versions comprehensively with fruit and vegetable packers such as Chalkis Tomato Products in China having been using them since 2008.

For Rasselstein, the key issue in downgauging isn't one of development of the manufacturing process in the mill. It's already achieved that. Indeed, its technology chief Karl Ernst Friedrich said that material down to 0.06mm 60 microns was being made for other applications, such as in the automotive industry.

The critical point for food canners is the performance of the can in resisting heat and pressure changes in a high-pressure retort. As canmaking expert Bev Page says, the thinnest gauge for a standard 73mm half-kilo food can to withstand a 2 bar pressure change during the first stage of processing is currently 0.12mm.

Another key issue is that canmakers will want to have at least two suppliers of whatever lighter-gauge material is required, said Roeske. “Canmakers don't want to have one source,” he said. Which is fine if other tinplate suppliers are working on thinner gauges of tinplate. ArcelorMittal is said to be working on gauges down to 90 microns.

Progress with the development of the coating and fabrication technology was highlighted at Rasselstein's Future Symposium in 2009 when a number of machinery suppliers detailed the work they'd done to enable their systems to accommodate thinner and often harder when double reduced steels are used materials.

KBA-Metalprint showed that when the gauge was less than 0.14mm, the tinplate started behaving uncontrollably in the handling systems, the coater and the curing ovens.

It's made further advances since then. KBA's sales manager Bernd Pesch has detailed how its development teams had refined the processes to enable the thinner gauges to be coated and cured reliably.

“Sheet handling is the most important thing,” he said. “You can't any longer push the sheets through the coater; they must be drawn. Then in the coater you must prevent the sheet from sticking to the cylinder. This has meant using lacquer conditioning that controls the viscosity.”

“In the curing oven, the air flow has to be better controlled, and the sheets must not be allowed to touch anywhere but at the edges. We designed three-dimensional wickets so that the sheets were more stable and did not collapse.”

“Finally, the stacking has been revised with an overhead system. The sheet is moved with belts, vacuum or magnets without bumping. In effect the sheet is transported on what is a virtual line so that there is no contact with the lays.”

Canmaking machinery manufacturer Soudronic has also been at the forefront of promoting the use of thinner tinplate gauges as part of efforts to show that the industry has the capability of reducing metal consumption. As this falls then energy savings are made along with overall carbon dioxide emissions.

Soudronic's Jakob Guyer has long been an advocate for the use of thinner gauge cans, and has demonstrated that Soudronic's welders have the capability of fabricating can bodies using 0.10mm tinplate.

He highlights China's ORG Packaging, the canmaker that has an alliance with Europe's Ardagh, and which has been working to reduce the gauge of its three-piece steel drinks cans. The potential for this market in China, which is under threat from aluminium cans, is huge if only because of its size: more than eight billion a year.

“ORG could possibly be one of the first to use 0.12mm tinplate for its Red Bull cans, which has been testing them,” said Guyer. Currently ORG uses 0.20mm and has been showing examples of 0.15mm-gauge prototypes. The use of 0.12mm would provide a massive saving.

With tinplate prices expected to be on the rise again, and with canmakers now negotiating with the mills every six months, some see further gauge reductions as a means to mitigate the price increases.

But it's unlikely that it will be possible to offset cost rises simply by downgauging when operational issues for customers come into play. That loses sight of the bigger picture, which is that in a world that is gripped by sustainability developments, canmakers will benefit when consumers become aware that efforts are being made to cut the use of valuable resources such as metals.

The food and drinks industry may not be capable of adopting 0.10mm tinplate for half-kilo cans now, but at least there are many who are working towards it with commercial applications. That's a great message to tell the world.



MARK AEGLER
 Hoffmann Neopac AG
 CEO

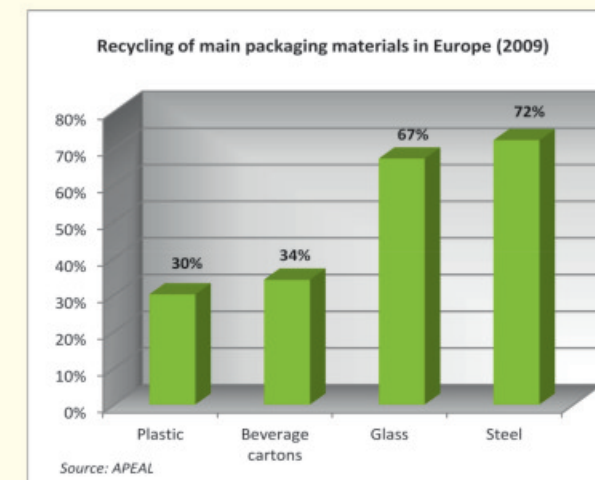
CONSUMERS ARE ASKING MORE AND MORE FOR ENVIRONMENTALLY-FRIENDLY PACKAGING AND WANT TO LIVE MORE SUSTAINABLY.

At Hoffmann we are fully aware of our responsibilities to the environment and so working on environmental matters has become part of the daily activities of our company. We ensure this by establishing annual programs for the improvement of our environmentally friendly production of metal packaging products. Metal is 100% recyclable “more with less” Metal packaging is made of raw materials that occur very frequently in nature and are 100% recyclable without a loss of quality. The recycling process saves a significant amount of energy and can be repeated an infinite number of times. Hence, reusing metal for packaging and recycling it into new steel is a never ending process.



Metal has very high recycling rates

The recycling rate for metal packaging is extremely high. Metal is the most recycled packaging material in Europe. In 2009 the recycling rate was 72% and this high recycling rate is increasing every year, thus further reducing the low carbon footprint of metal packaging.



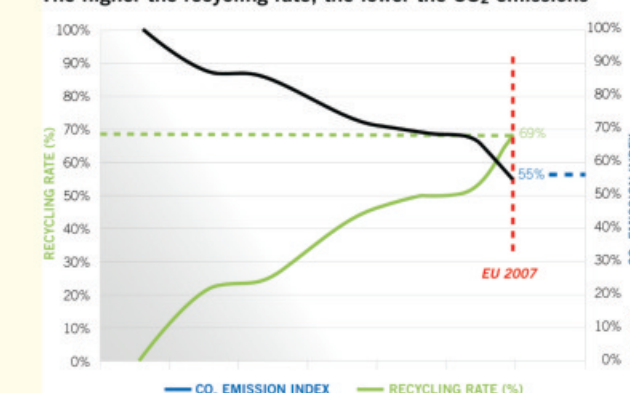
Metal is a sustainable packaging

The barrier properties of metal packaging provide foodstuff safety for consumers, even with lower material consumption 100% air and light-tight. Metal packaging requires no secondary packaging and helps to reduce waste of food. It does not consume energy during transportation and storage in your home.

Metal has the best recycling and recovery rates among all the packaging material industries.

It offers the most flexible approach to material reuse and through recycling it is a proven resource for a sustainable future.

The higher the recycling rate, the lower the CO₂ emissions



Four out of five empty tins are being recycled. FERRO Recycling, the Swiss association for tin recycling is working together with Swiss communities and cooperative associations. Its set goal is to support a nationwide recycling concept. At the moment, 82% of all sold tins in Switzerland are being collected in over 4000 collection containers and given back to the recycling process. We take care at Hoffmann, we promote sustainability wherever possible through our business activities and minimize the damage we cause to the environment. To this end, our corporate strategies cover the following areas:

- Energy efficiency and reduction of CO₂ emissions under an agreement with the Swiss Confederation HOFFMANN recognized the signs of the times years ago and made an agreement with the Swiss Confederation for the reduction of its CO₂ emissions and increasing energy efficiency. In the years since then, the quantity of metal processed by HOFFMANN has increased sharply. But we have succeeded in keeping our CO₂ emissions within the limits. Process improvements have reduced our total energy consumption and energy efficiency has increased significantly as a result. We promote this positive progress through continuously investing in the latest technology and through increasing availability of machines and equipment throughout the production process. We strive to identify «energy guzzlers» in all the links in the profitability chain and to improve or eliminate them wherever we can. We make a contribution to the protection of the environment in the interests of all of us.

- «VOC» volatile organic compounds Volatile organic compounds (VOC) are used as solvents in varnishes and other commercial products, such as cleaning fluids. If these substances escape into the air they contribute, just like carbon dioxide, to excessive concentrations of ozone or «summer smog». Thermal incinerators have been installed in the varnishing lines at HOFFMANN for almost 30 years and these prevent the emission of VOCs and scrub out harmful combustion gases. Continuous checks on emission values and yearly analysis of the quantities of VOCs processed give us a sound basis for the improvement of our processes.

Further areas where we promote sustainability:

- Waste management under the principle of prevent/reduce/recycle
- Recycling of valuable substances
- Use of environmentally-friendly technologies

Hoffmann The Tin your environmentally friendly producer for premium metal packaging innovations, high quality printing and embossing.