

All answers attributed to:
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### **COVER STORY FOR PRINT WEEK INDIA**

- Q1. Uflex has been one of the early movers in wide-web flexo for flexible packaging. What is Uflex's flexo-printing and converting capacity today? Where do we as an industry today stand on the debate of flexo versus gravure?
- A1. Flexographic and Rotogravure printings have their own sets of advantages for specific converting applications, so it's not a question of debate between the two technologies. Both are efficient technologies in their own right. CI Flexo printing is desirable when the substrate is thin. For example flexo-graphic printing on Polyethylene or Stretchable Film is getting increasingly popular. For shorter runs CI Flexo Printing machines are certainly recommended. The cost of procuring plates for CI Flexo printing is less than the cost of procuring gravure cylinders therefore when the operational costs have to be optimized a customer usually prefers CI Flexo Printing Machine. The use of Flexo Printing technology is on a rise as single polymer flexible packaging is becoming popular by the days from the point of view of recyclability. With increasing varieties of SKUs and products, the job runs are becoming shorter again building up a case for Flexo printing machines.

This does not make rotogravure printing any less popular or important. Rotogravure technology renders exceptionally high quality results rapidly. It is more suitable for longer print runs. Rotogravure as a process inherently can print both solids and process tones within the same image carrier.

Flexographic printing is quite popular in most of America while rotogravure technology is also picking up of late. In Europe the trend and predilection is again tilted towards flexographic printing although rotogravure printing is not far behind. In the entire Asia Pacific Rotogravure technology still rules the roost.

In terms of percentages the share of flexo printing at Uflex Converting would be around 15% while that of rotogravure printing around 85%.

Given the popularity of both technologies in varied circumstances, Uflex manufactures both Rotogravure and Flexographic presses. In fact you would be aware that during

DRUPA 2016 we shook hands with Comiflex S.R.L. of Italy for manufacturing C.I. Flexo presses at our plant in Noida.

Comiflex SRL may not be a very big firm in terms of size, but the technological command and know-how that the owner of Comiflex, Mr. Gianfranco Nespoli holds in the industry is commendable. Considering that we are talking about capital equipment, quality always supersedes quantity. In fact we launched the first ever Made in India Gearless Central Impression Flexo Printing Machine and have already installed the same at our converting operation. This C.I. Flexo Press can handle a web width of 1350 mm with an attainable speed up to 400 meters per minute depending upon the type and quality of materials to be printed, inks, plates, ink coverage with colour overlay among others. The Anilox sleeves for this machine are ceramic coated having a diameter of 172 mm. The press can work with both water and solvent based inks for printing a variety of substrates like HD-LDPE (14 -100 microns); Polypropylene (10 – 50 microns); PET (10 – 50 microns) and Paper (40 – 80 gsm) among others.

Q2. The developments in digital printing have been promising over last few years. What are your views on digital printing for flexible packaging? Huhtamaki PPL has invested in India's first HP Indigo 20000 press, when can we see Uflex making the digital leap?

**A2.** Digital printing is undoubtedly getting increasingly popular for the myriad benefits it offers towards short run jobs and we as a flexible packaging company find this technology very efficient for the contemporary industrial landscape.

However there are certain challenges with Digital Printing as well. This technology is suitable for short runs because of the high cost. The square meter cost of printing is nearly 6-8 times to that of gravure. No amount of shorter runs can actually tend to justify this difference. Uflex has innovated and developed an alternate method of printing short run jobs. This process is cost-effective and more user friendly than digital printing. By reducing the width and subsequently increasing the length we reduce the set-up waste which is the main cause of overall wastage in short run jobs.

There are certain advantages of digital printing like Variable Data Printing (VDP) which allows variable artwork to be printed in a very cost-effective manner. This concept is very popular for convertors of labels as they can offer it as a value added feature more than just a cost effective method of printing. Some convertors supplying labels and shrink sleeves to aerated beverages/ drinks etc. are using Variable Data Printing (VDP).

While digital printing is certainly low on wastage, the savings that accrue on account of less wastage do not really match up with the high running costs considering consumables like inks etc. The business model for digital presses is on a per click basis which makes the operational costs prohibitively expensive, so Digital Printing does not make a viable proposition for most convertors of flexible packaging. Talking about Variable Data Printing (VDP), the market in India is not so significant. Even the western

countries do not pose a meaty demand for VDP therefore digital printing will still take time to come up to the levels of viability globally.

In fact Uflex was the first company to conduct a full-fledged study back in 2011 on the viability of digital printing in flexible packaging.

Having said that, we are not averse to this brilliant technology but will only consider investing in the same when it makes a compelling commercial case!

### Q3. Uflex has been part of the National Green Tribunal case regarding ban on multilayer plastics packaging. What's the update on the case?

**A3.** The matter is pending with Hon'ble Supreme Court of India.

However I would particularly like to mention over here that multilayered flexible packaging is very efficient and requires much less energy throughout the three critical phases of its life-cycle i.e. manufacturing, transportation and disposal. Flexible packaging is re-processable and at the end of life the post-consumer- recyclate can be easily converted into alternate non-critical and non-food contact materials of utility like chairs, boom barriers, road dividers and several more.

Plastic Waste Management (Amendment) Rules, 2018 notified by Ministry of Environment, Forest and Climate Change, Government of India on 27 March 2018 encourages re-cyclabilty/ re-processability and energy recovery from waste multilayered flexible packaging into usable heat, electricity or fuel through a variety of processes including combustion, gasification, pyrolisation, anaerobic digestion and land fill gas recovery. I applaud the Government for the latest notification.

I am glad to share that our packaging manufacturing facilities are equipped with reprocessing plants where multilayered laminates are converted into polymeric pellets that are further used for making various non-critical and non-food contact utility items. Our Waste to Energy plants (again an integral part of our manufacturing plants) further up-hold our commitment towards environmental sustainability. We are also working towards installing Waste to fossil fuel conversion plant at our Noida precinct soon.

- Q4. Current ban on plastics in Maharashtra doesn't seem to be a well-thought decision. What are your views? What, according to you, is the correct way of handling the situation from the government's side? What are your suggestions to the government contemplating ban on plastics?
- **A4**. On Earth Day, I was invited by Business Today to write an opinion editorial on this whole plastic vilification issue. I am sure you must have had the opportunity of going through the piece.

Banning is absolutely **NO** solution. Petrol and Diesel vehicles are known to be a potential source of air pollution. Have the Petrol and Diesel pumps been shut down

across the globe? Similarly banning of plastics or packaging is nothing short of a knee-jerk reaction. Please understand that the packaging does not walk on its two legs and get immersed in our water bodies. It is the people across the globe that litter and contaminate rivers and oceans by littering all over. Who is to be blamed for this apathy? I would reiterate that banning plastic or packaging is absolutely no solution.

To all those who frown at flexible packaging just because it comes from the family of plastics/ polymers, I would like to remind that a lot of elegant clothes that we wear and flaunt are also made of polyester fibre and yarn which again comes from plastic. It is quite surprising that nobody complains about it. Had plastic not been invented, many regular, essential and luxury items that you see around yourself and use in your daily lives would have been made from plants either directly or indirectly. If that were to happen, believe you me our earth would have been bereft of its entire green cover. In layman's language that would have left our planet bald and tonsured because no plants and trees would have been spared by man. Today if you see your planet green, it's only because of plastics. One must be grateful to plastic!

The actual remedy lies in collaborative action by Government, Corporate Houses, Trade Bodies, Academia, Brands, Civil Society Organizations and most importantly Public at large to dispose-off packaging much more responsibly so that it becomes tenable to adopt technologies that further drive collection, sortation and reprocessing of flexible materials. A lot of work has been done by the companies towards down-gauging of polymeric films and light-weighting of over-all flexible packaging structures. In fact, there's a limit to how much one can down-gauge in flexible packaging and the industry has by and large plateaued. Now that this low hanging fruit has been plucked, much more institutionalized efforts have to go towards hybrid bio-based materials, greener chemistry replacements, sustainable sourcing and composting (home and industrial) among other efforts to give a much-needed impetus to Circular Economy and Sustainable Material Management. A lot of commendable work is happening across the globe over all of this.

At the cost of repetition, I would like to say that the biggest problem in our country related packaging and plastic waste is its collection.

A plausible step by Government could be to impose some amount of tax on all plastics used in whichever or whatever form. This tax could be termed 'Plastic Waste Management Tax'. It should be levied on all producers and brand owners at let's say Rs. 2-3 per kg. This money should be strictly used for the purposes of plastic waste collection and further processing. If this is implemented in letter and spirit, I am of the firm view that India will become the first country that will be free from waste plastic setting examples for others globally.

Q5. In earlier days, innovation in flexible packaging was focused on coextrusions. Now, it seems like most activity is in laminations. What's your take on this and why?

- **A5**. That's a good question. Yes I agree that a lot of research and development is happening in the field of laminated flexible packaging structures. There are reasons for as to why laminated structures score an edge above co-extruded flexible packaging structures. Some of these reasons are:
  - (a) The requirement of ultra-high barrier is not met by co-extrusion, particularly when we consider aluminium foil as barrier;
  - (b) In case of laminated flexible packaging structure the convertor can go for reverse printing that tremendously enhances the aesthetics;
  - (c) To run the packaging material on high speed lines there are many variables like COF; Mechanical Properties; Lower SITs etc. that are important to be considered. It is quite difficult to simultaneously achieve all these three parameters optimally in a mono-layered co-extruded film.

#### Q6. How about coating technology for flexible packaging?

**A6**. As an end-to-end flexible packaging materials and solution company with Innovation to create value added differentiation being the guiding vector, Uflex's pays special attention towards formulation of coatings aimed for (a) improving the barrier properties of films, (b) improving the ink and metal adhesion characteristics (c) improving the heat sealing characteristics (d) Improving the anti-counterfeiting characteristics and (e) improving conductivity characteristics of substrates among several others. This is an ongoing process and we have had several breakthroughs in terms of proprietary coatings for flexible packaging.

# Q7. E-Commerce is a growing market for packaging in general, as well as for flexible packages. What opportunities do you see here because of the different distribution method (that is, small parcel versus pallet-load shipping)?

A7. At present Uflex as India's largest multinational flexible packaging materials and Solution Company caters to specialized primary packaging requirements of myriad Indian and International FMCG brands in terms of enhanced aesthetics; optimized barrier properties; superior pack functionalities; fool proof anti-counterfeiting features and high sustainability quotient to create a gratifying First Moment of Truth (FMOT). E-Commerce is certainly growing and has added an altogether new dimension to the way products are now being ordered (including FMCG). This is certainly good from consumption point of view and has a direct bearing on flexible packaging material requirement. We are currently focusing at enhancing our prowess and capabilities in manufacturing very specialized and value added primary flexible packaging.

### Q8. Can barrier films be an answer to food wastage in India and enable broader food distribution?

#### **A8.** Yes. Most Certainly! Let's discuss this at length!

In India there are three important aspects that shape the overall packaging strategy for food items.

- (a) Varied weather / climatic conditions. We have coastal climate in Kerala, arid and dry conditions in Udaipur. Then we also have cold areas and the plains.
- (b) With too much urbanization, the place of production of food is almost always quite far from the place of consumption;
- (c) Supply chain and logistic conditions across the length and breadth of the country are inclement.

The above three factors jointly and severally make a perfect recipe for food spoilage and wastage.

Think about apples growing in Kashmir that have to be consumed down South. The time that would be required to transport these apples to let's say Kerala will run into weeks. Proper storage and transportation would therefore need to be provided. Optimized packaging would become more important than ever to protect the apples from being spoilt. Same is the case with other food products that are grown in one part of the country and consumed in a cardinally opposite part altogether. Fish can be packed with dry ice and transported from Goa to Delhi. Coconut water properly packed in aseptic packs can be transported from Cochin to the retail shelves all across the country.

India is one country where all the three factors comprising perfect recipe for food spoilage co-exist at all times, therefore there cannot be a better testing ground for various types of food packaging than India.

To understand this yet better let's take the example of flexible packaging for potato wafers. In India considering all the three points that I mentioned earlier, the wafers have to be protected by the way of nitrogen flushing so the pack would be absolutely inflated with the gas. Packing the same potato wafers in non-tropical (cold) countries would not require such meticulous packaging.

While cooked food would be spoiled in around 12-14 hours in India, the same will easily sustain over 36-48 hours at the very least in the United States. This calls for very different treatment in terms of designing appropriate packaging structures catering to specific needs geographically.

Barrier films form the backbone of flexible packaging. Barrier properties required by various food items will be different from each other and would have to be scientifically

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ascertained and optimally designed in the overall packaging structure. By enhancing the shelf life of food items through appropriate packaging, both brands and consumers can enjoy an extended window of opportunity for selling and buying the food products.

To sum up, appropriate barrier packaging will go a long way in protecting food from spoilage in India besides aiding towards efficient distribution.

### Q9. Is 100% recyclable flexible packaging possible?

**A9.** I have been reiterating time and again that Flexible Packaging and Plastics have a definitive **Alternate End of Life** use hence it is 100% sustainable. At the end of life the post-consumer- recyclate can be easily converted into alternate non-critical and non-food contact materials of utility like chairs, boom barriers, roads, road dividers and several more. Additionally energy can be recovered from waste multilayered flexible packaging and plastics in the form of usable heat, electricity or fuel through a variety of processes including combustion, gasification, pyrolisation, anaerobic digestion and land fill gas recovery.

We at Uflex accord high importance to sustainability. In fact innovation and sustainability at Uflex go hand in hand keeping the 'GREEN' Promise by Using renewable resources; Maximizing post-consumer re-cyclate usage; Reducing all-production waste; Reusing all-production waste; Using all non-recyclable waste to produce energy; Progressively optimizing energy consumption; Optimally down-gauging the substrates and Light-weighting the packaging structures.

Our packaging manufacturing facilities are equipped with reprocessing plants where multi-layered laminates are converted into polymeric pellets that are further used for making various non-critical and non-food contact utility items. Our Waste to Energy plants (again an integral part of our manufacturing plants) further up-hold our commitment towards environmental sustainability. We are also working towards installing Waste to fossil fuel conversion plant at our Noida precinct soon.

### Q10. Is there a market for post-consumer recycled (PCR) materials in flexible packaging? Why or why not?

**A10.** There is a huge market for post-consumer recycled materials in flexible packaging. In fact some of the most viable *Alternate End of Life Use* for Plastics and Flexible Packaging are road construction and pyrolysis. This is because of very high energy value of plastics and polymers. Further, highly variable molecular chains in plastics and polymers again aid in various types of end of life use.

## Q11. What are some of the barriers to using recycled-content materials, specifically PCR, in new flexible packages?

**A11.** The re-cycled material specifically from multilayered flexible packaging is usually not transparent. Therefore it restricts the use of such content for new packaging.

Multilayered flexible packaging waste owing to various substrates involved has different molecular weights therefore its migratory properties remain unknown. It should therefore not be used in flexible packaging for direct food contact.

#### Q12. Have you made any developments on ALOx front?

**A12.** ALOx coated films are a regular part of the polymeric film portfolio at Uflex.

Earlier in 2016 we launched 9.5 micron speciality ALOx polyester film, FLEXALOXPROTECT™ F-PGX which happens to be the thinnest PET ALOx film available globally. Despite being the leanest, the 9.5 micron ALOx polyester film exhibits excellent barrier for oxygen and water vapour as W.V.T.R (gm/m²/day) and O.T.R (cc/m<sup>2</sup>/day) are both < 1.0. No player other than Uflex offers such a thin PET ALOx speciality film with such superior barrier properties. Being a down-gauged film FLEXALOXPROTECT™ F-PGX is 24 % lighter than its 12.5 micron variant and almost 60% lighter than the 23.5 micron variant. Furthermore, the price coordinates are better and so is the yield. While the 12.5 micron ALOx film has a yield of 57.14 m<sup>2</sup>/kg and the 23.5 micron film has a yield of 30.4 m<sup>2</sup>/kg, the 9.5 micron speciality ALOx film yields 75.18 m<sup>2</sup> per kg. This brings major cost savings for the converters. The fact that the film is transparent and demonstrates excellent barrier properties, the need for a sandwich (barrier) layer which is typically a metallized film is completely eliminated. The PET ALOx film can be reverse printed and then laminated with a sealing substrate. Depending upon the barrier properties required by the product to be packed, ALOx coated films can be used in 2-ply structures right up-to multi-layered laminates.

Like I mentioned earlier ALOx coated films happen to be an inherent part of Uflex's portfolio. We keep researching for enhancing the barrier properties and other functional/mechanical aspects of the film.

## Q13. Food safety is a big concern. What are the different levels at which food safety needs to be handled and who are the relevant stakeholders?

**A13.** Uflex since its inception as a policy for manufacturing the flexible packaging solutions has been using the best quality of inks & adhesives, coatings and best resins which have least migratory properties. Monomer migration is the most important quality parameter for Uflex Packaging.

All our plants are BRC approved for food safety. We adhere to the entire HACCP norms for manufacturing besides following hygiene factors and Good Manufacturing Practices for food safety. Food safety is the single most important criteria for a flexible packaging company. Food safe flexible packaging material can be almost 20% more expensive than non-food safe packaging material. The relevant stakeholders are brands, packaging suppliers and other supply chain actors.

Every year our plants are audited by BRC & AIB on Good Manufacturing Practices for food safety. No material that we use has migratory properties more than that permitted by FDA.

#### Food safety needs to be carefully handled at the following four stages:

- Packaging material manufacturing stage;
- In the supply chain of the packaging material;
- At the packing and filling lines;
- Last mile product delivery supply chain.

# Q14. Uflex has announced an investment of Rs. 1700-crore in Uttar Pradesh at Uttar Pradesh Investors' Summit 2018. How much money will be invested in sustainability- and what is the plan?

**A14.** Given the myriad benefits like light-weighting/ down-gauging, sustainability, reduction at source, high product to package ratio, lesser penetration in the Indian market, lesser energy utilization at all the three stages of the product lifecycle i.e. manufacturing, transportation and disposal, there is no stopping for the flexible packaging industry.

We have ambitious plans to substantially enhance our manufacturing capacity for flexible packaging in Uttar Pradesh in the next few years. This would entail the need of following machinery and capital equipment in a phased manner:

- Conventional Gravure & C.I. Flexo Printing Machines;
- Hi-Tec Gravure & C.I. Flexo Printing Machines with LED curing system first time in the world;
- Extrusion Coating Lamination Machines;
- Solvent Based & Solvent less lamination Machines:
- High Speed Inspection and rewinding Machines;
- Slitters & Doctoring Machines;
- Utilities like boilers, heating systems, chillers, generator etc.

For seeing this through fruition from scratch to finish we endeavor to invest Rs. 500 crore towards the project. We would require around 75 acres of land for doing this. Our capacity enhancement would generate employment for additional 500 people. To achieve this goal well in time we solicit Government's support in terms of quick approvals, infrastructure towards road & rail transportation; well-developed industrial land with proximity to residential hub for easy sourcing of manpower and uninterrupted power supply among others.

As a Group we lay a lot of emphasis on environmental sustainability in all our business processes therefore we propose to set up a solar project on 300 acres with an investment of approximately Rs. 1200 Crore. The land requirement works out to about 4-5 acres per megawatt depending upon various technologies of photovoltaic cells. The useful life of a typical solar plant spans across 25 years. The proposed project is expected to generate employment for 250 people at various levels. Electricity thus produced will be used for captive consumption and the surplus shall be supplied to state or national grid. This would be Uflex's contribution towards Government of India's target of achieving 100 GW of solar power by 2022.

### SUPPLEMENTARY QUESTIONS for UFLEX LIMITED

- 1. Being one of the biggest players in the segment or the biggest with seven verticals packaging films; packaging; liquid packaging; chemicals; engineering; cylinders and holography. What is your definition of sustainability and what are the steps taken by you?
- A1. We at Uflex accord supreme importance to Sustainability across business verticals both for products and processes. In fact innovation and sustainability at Uflex go hand in hand keeping the 'GREEN' Promise by Using renewable resources; Maximizing post-consumer re-cyclate usage; Reducing all-production waste; Reusing all-production waste; Using all non-recyclable waste to produce energy; Progressively optimizing energy consumption; Optimally down-gauging the substrates and Light-weighting the packaging structures.

I am pleased to share that back in the year 1995 at Recycle'95 -Davos Global Forum, Uflex (then Flex Industries Limited) was conferred with the Best Paper Award as a testament to unrelenting work towards carbon footprint neutralization and sustainability much before these became global concerns. The award was given for the subject of 'recycling of mixed plastic waste comprising of laminated films of Metallized PET/LDPE/BOPP and printed with inks.



Our packaging manufacturing facilities are equipped with reprocessing plants where multi-layered laminates are converted into polymeric pellets that are further used for making various non-critical and non-food contact utility items. Our Waste to Energy plants (again an integral part of our manufacturing plants) further up-hold our commitment towards environmental sustainability. We are also working towards installing Waste to fossil fuel conversion plant at our Noida precinct soon.

In the parlance of Flexible Packaging, Sustainability is the ability to convert post-consumer waste to **Alternate End of Life Utility**. At the cost of repetition I would like to say that Flexible Packaging and Plastics have a definitive **Alternate End of Life** use hence it is 100% sustainable. At the end of life the post-consumer- recyclate can be easily converted into alternate non-critical and non-food contact materials of utility like chairs, boom barriers, roads, road dividers and several more. Additionally energy can be recovered from waste multilayered flexible packaging and plastics in the form of usable heat, electricity or fuel through a variety of processes including combustion, gasification, pyrolization, anaerobic digestion and land fill gas recovery.

- 2. How much is your carbon footprint at Uflex? How much was it a decade or five-years ago, what is the situation now and please share further steps. What are your parameters for sustainability? Are they different from others? If yes, why?
- **A2.** If we talk about our Packaging Business, the Carbon Footprint assessed in 2007 was 2.92 MT per MT of flexible packaging manufactured. In 2010 it was assessed at 2.05 MT. In 2017 our Carbon Footprint was pegged at 1.92 MT per MT of flexible packaging manufactured.

While our foot-print may be higher than the company (in the flexible packaging sector) that has the lowest carbon foot print but we are certainly less than the global industrial average. We are continually working towards further reducing our CO<sub>2</sub> emissions through focused and systematic interventions towards Using renewable resources; Maximizing post-consumer re-cyclate usage; Reducing all-production waste; Reusing all-production waste; Using all non-recyclable waste to produce energy; Progressively optimizing energy consumption; Optimally down-gauging the substrates and Light-weighting the packaging structures.

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While all our business verticals are taking time bound, concrete and definitive measures towards sustainability, owing to paucity of space, I would be hereby discussing some specific interventions taken up by our Chemicals Business.

Upholding the Group's ideology of ascribing utmost importance to Sustainability, Chemicals' Business of Uflex has taken plethora of initiatives and adopted scientifically proven methods for significantly reducing water consumption at its manufacturing sites without hampering the production efficiency in any manner whatsoever. Going beyond

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the call of compliance the Business on several occasions has conducted voluntary audits that have further shown the path towards reducing energy and water consumption. Renowned subject matter experts are regularly invited to hold training and demonstration sessions at the manufacturing facilities living up to the highest standards of Environment, Health and Safety (EHS). Chemicals Business much like other business verticals of Uflex regularly organizes tree plantation drives in an endeavour to contribute towards a greener and cleaner planet.

The zeal for contributing towards environmental sustainability also reflects in the R&D charter of the Chemicals Business as it strives to manufacture products with minimal impact on the environment. To cite a few examples the VOC Free adhesives made indigenously by the Chemicals Team are eco-friendly and can be used for direct/indirect food contact in flexible packaging applications.

Besides being compliant with European commission regulation (EU) no- 10/2011, these adhesives do not have any ozone depleting constituents. Uflex Chemicals has also developed non-toluene, non-ketone based polyurethane resin that is non-carcinogenic and free from odour. The team has also developed energy curable ink which does not have any volatile organic compounds (VOC). These are just some of the very many interventions that the Business has undertaken towards environment and sustainability.

- 3. Lot of discussion over bio-based materials has taken place. Yet the materials are yet to make major inroads to India. Do you think India is prepared for this challenge?
- **A3.** I would say India is currently preparing for developing bio-degradable materials for successfully using in the packaging industry. We are also doing significant work in this direction. We have had a breakthrough in Polyethylene (PE) and R&D is in progress for BOPET and BOPP. Once this work completes, almost 80% of the flexible packaging material that we manufacture would become bio-degradable.
- 4. Exports have emerged as a major source of revenue for Uflex. Yet the regulations (especially sustainability related) are very strong. How are Indian companies coping with it? Especially Uflex selling its products in more than 140 countries!
- **A4.** In 2017 the Carbon Footprint for our Packaging Business stood at 1.92 MT per MT of flexible packaging manufactured. While we may be higher than the company that has the lowest carbon footprint in the flexible packaging industry we are less than the industry average. We have a definitive roadmap to keep reducing our carbon foot-print till it becomes the lowest. The industry and clients across the globe acknowledge the efforts we are making in terms of sustainability and carbon footprint optimization thus it has never been a challenge for us in selling our products in various countries.
- 5. We hear about upcoming Indian regulation on packaging safety. Can you brief us will it impact Uflex? Also, being the experts in your individual capacity is there

### any means of evolving the upcoming regulations to next level in future. If yes, what more would you expect from a body such as FSSAI?

**A5.** Presently the food safety regulations in India are generic and far from being specific on issues like migration, hygiene and good manufacturing practices (GMP) levels. While FSSAI is silent on many food safety aspects related to packaging, Uflex being a leading global exporter of flexible packaging solutions in over 140 countries is mindful of the requirements of various MNC food companies (clients) and has been meeting all the major International Food Safety Norms/ Standards. Uflex is geared up for any potential intervention by FSSAI towards upgradation of the food safety norms in India. We comply with the REACH regulations of the European Union; Food & Drug Administration (FDA) of United States and Swiss Norms for food safety regulations both for Indian and International Clients of Flexible Packaging.