

#### **GREEN SUPPLY CHAIN – UNILEVER**

RAM BHADOURIA UNILEVER.

# Mysore GreenCo Silver









# LEADERSHIP AND STRATEGY



#### UNILEVER SUSTAINABLE LIVING PLAN

Small Actions. Big Difference.

#### INTRODUCTION

#### Two billion times a day somebody, somewhere, uses a Unilever brand.

Our products make small but important differences to the quality of people's everyday lives.

We have ambitious plans to grow our company. In fact, we intend to double our sales. This growth will create jobs and income for all those whose livelihoods are linked to our success—our employees, our suppliers, our customers, our investors and hundreds of thousands of farmers around the world.

#### Sustainable growth

But grow th at any cost is not viable. We have to develop new ways of doing business which will increase the positive social benefits arising from Uniterer's activities while at the same time reducing our environmental impacts. We want to be a sustainable business in every sense of the word.

We do not believe there is a conflict between sustainability and profitable growth. The daily act of making and selling consumer goods drives economic and social progress. These are billions of people around the world who deserve the better quality of life that everyday products like soap, shampoo and tea can provide.

#### Creating a better future

Our vision is to create a better future in which people cars improve their quality of life without increasing their environmental footprint.

Our strategy is to increase our social impacts by ensuring that our products meet the needs of people everywhere for balanced nutrition, good hygiene and the confidence which comes from having clean dother, clean hair and good skin.

But we recognise that in order to live within the natural limits of the planet we will have to decouple growth from environmental impact.

This starts with our own operations. We will achieve absolute reductions in greenhouse gases (GHGs), water and waste. In particular we will meet the United Nations' requirement' to reduce GHGs by 50-85% by 2050 in order to limit global temperature rise to two degrees.

However, our impact goes beyond our factory gates. The sourcing of raw materials and the use of our products by the consumer at home have a far larger footprint. We recognise this and so our plan is designed to reduce our impacts across the whole lifecycle of our products. Innovation and technology will be key to achieving these reductions.

#### The Unilever Sustainable Living Plan

will result in three significant outcomes by 2020.

- We will help more than a billion people take action to improve their health and well-being.
- We will decouple our grow th from our environmental impact, achieving absolute reductions across the product lifecycle. Our goal is to halve the environmental footprint of the making and use of our products.
- We will enhance the livelihoods of hundreds of thousands of people in our supply chain.

Delivering these commitments won't be easy. To achieve them we will have to work in partnership with governments, NGOs, suppliers and others to address the big challenges which confront us all.

Ultimately we will only succeed if we inspire billions of people around the world to take the small, everyday actions that add up to a big difference – actions that will enable us all to live more sustainably.

0.28

Paul Polman Chief Executive Officer

Reduce GHGs by 50-85% by 2050.



'Halve the environmental footprint of the making and use of our products.'

#### Public disclosures made through:

- <u>Unilever's Website</u>
- <u>Online Unilever Sustainable Living</u> <u>Report 2012</u>
- GRI Reports
- Environmental Disclosures

#### UNILEVER SUSTAINABLE LIVING PLAN



Small Actions. Big Difference,



# THE UNILEVER SUSTAINABLE LIVING PLAN



#### USLP will result in three significant outcomes by 2020.

- We will help more than a billion people take action to improve their health and well-being.
- We will decouple our growth from our environmental impact, achieving absolute reductions across the product lifecycle.
- Our goal is to halve the environmental footprint of the making and use of our products.
- We will enhance the livelihoods of hundreds of thousands of people in our supply chain.

#### REDUCING ENVIRONMENTAL IMPACT

By 2020 our goal is to halve the environmental footprint of the making and use of our products as we grow our business.\*

#### ENHANCING LIVELIHOODS

By 2020 we will enhance the livelihoods of hundreds of thousands of people as we grow our business.

#### GREENHOUSE GASES

Haive the greenhouse gas impact of our products across the lifecycle by 2020."

#### WATER

Hake the water associated with the consumer use of our products by 2020."

#### WASTE

Halve the waste associated with the disposal of our products by 2020."

#### SUSTAINABLE SOURCING

By 2020 we will source 100% of our agricultural raw materials sustainably:

#### BETTER LIVELIHOODS

By 2020 we will link more than 500,000 smallholder farmers and small-scale distributors into our supply chain.







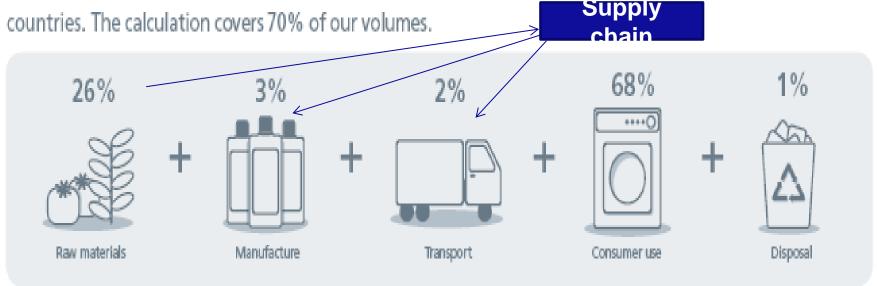


#### **END TO END SUPPLY CHAIN**



#### Our Footprint

Using this metric we set a baseline by calculating the GHG emissions across the lifecycle of over 1,600 representative products. We calculated it at an absolute level as well as on a 'per consumer use' basis in 14



Source for footprint and breakdown below: Unilever 2008 baseline study across 14 countries. Total in tonnes.

The baseline shows us that manufacturing and transport represent just 5% of our total impacts, while sourcing of raw materials and consumer use together account for over 90%.

# BETTER PRODUCTS .... LESS WATER / ENERGY





One in 3 households worldwide uses a Unilever laundry product – that's 125 billion washes a year.

Concentrated liquid detergents reduce GHGs by 10-50% per dose

If everyone used concentrated variants we would save over

# 4 MILLION TONNES

of CO<sub>2</sub> per year, equivalent to taking

# 1 MILLION CARS

off the road annually



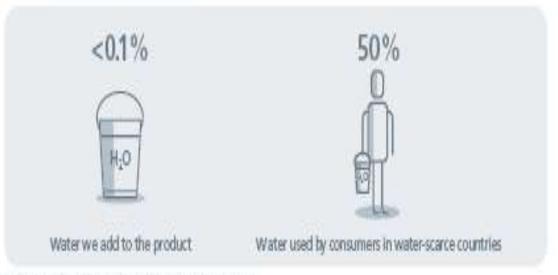
# GREEN PRODUCTS (LCA APPROACH.. WATER).



### Our Footprint

Using this metric we set a baseline for over 1,600 representative products, calculated at an absolute level as well as on a 'per consumer use' basis. The calculation was done in seven countries which we have defined as water-scarce, accounting for around half the world's population.





Source for footprint and breakdown below: Unilever 2008 baseline study across seven countries, Total in litres.

#### **BETTER PRODUCTS .... LESS WATER / ENERGY**



In water-scarce countries nearly 40% of our domestic water footprint comes from washing clothes. In many of these markets people do the laundry by hand.

With Comfort One Rinse fabric conditioner you only need one bucket for rinsing rather than three







# 30 LITRES of water saved per wash

or water saved per wa

More than

### 500 BILLION LITRES

of water would be saved if all our laundry product users in Asia and S Africa used Comfort One Rinse

#### **GREEN PACKAGING (LCA APPROACH).**



#### Our Footprint

Using this metric we set a baseline by calculating the waste from over 1,600 representative products. We did it at an absolute level as well as on a 'per consumer use' basis in 14 countries. The calculation covers 70% of our volumes.



Source for footprint and breakdown below: Unilever 2008 baseline study across 14 countries. Total in tonnes.

. . . .

#### **OUR TARGETS**

#### Halve the waste associated with the disposal of our products by 2020.\*



#### Reduce packaging

- By 2020 we will reduce the weight of packaging that we use by a third through:
  - Lightweighting materials.
  - Optimising structural and material design.
  - Developing concentrated versions of our products.
  - Eliminating unnecessary packaging.

#### Reuse packaging

We will provide consumers with refills in our home and personal care portfolio to make it possible to reuse the primary pack.

#### Tackle sachet waste

 Our goal is to develop and implement a sustainable business model for handling our sachet waste streams by 2015.

#### Recycle packaging

- Working in partnership with industry, governments and NGOs, we aim to increase recycling and recovery rates on average by 5% by 2015, and by 15% by 2020 in our top 14 countries. For some this means doubling or even tripling existing recycling rates.
- We will make it easier for consumers to recycle our packaging by using materials that best fit the end-of-life treatment facilities available in their countries.
- By 2020 we will increase the recycled material content in our packaging to maximum possible levels. This will act as a catalyst to increase recycling rates.

#### Eliminate PVC

 We will eliminate PVC from all packaging by 2012 (where technical solutions exist).

• Our Long term and Short term targets along with an Action Plan.

#### **OUR TARGETS**

Halve the waste associated with the disposal of our products by 2020.\*



#### Reduce waste from our manufacturing

- By 2020 total waste sent for disposal will be at or below 2008 levels despite significantly higher volumes. This represents an 80% reduction per tonne of production and a 70% absolute reduction (versus a 1995 baseline).
- All newly built factories will aim to generate less than half the waste of current ones.

#### **Future Challenges**

To achieve our target of increasing recycling and recovery rates we will need to work in partnership with governments, reprocessors and NGOs.

We will work towards the longer-term goal of 100% sustainable packaging by exploring the potential for emerging technologies and 'cradle-to-cradle' approaches.



• Our Long term and Short term targets along with an Action Plan.



# SUSTAINABLE SOURCING OF RAW MATERIAL.



#### Our Footprint

For certain raw materials our share of world volumes is large.

| (estimate)                            |     |
|---------------------------------------|-----|
| Black tea                             | 12% |
| Tomatoes for processing               | 6%  |
| Dried onion and garlic for processing | 5%  |
| Palm oil                              | 3%  |
| Rapeseed oil                          | 2%  |
| Sunflower oil                         | 2%  |
| Soy                                   | 1%  |



#### **OUR TARGETS**

By 2020 we will source 100% of our agricultural raw materials sustainably: = 10% by 2010 = 30% by 2012 = 50% by 2015 = 100% by 2020

#### SUSTAINABLE SOURCING OF RAW MATERIAL.



All Lipton Yellow Label and PG Tips tea bags in Western Europe were sourced from Rainforest Alliance Certified™ farms by 2010.

Covering 70 tea estates and

38,000 smallholder farmers



Providing good working conditions for

175,000

tea growers and conserving water supplies and protecting wildlife



#### **POLICY MAKING AND RESPONSIBILITY MATRIX**

Unilever Executive Board – USLP



#### Unilever Corporate Sustainability (Head)

Strategy & direction



#### Cluster level Corporate Sustainability (Head)

Apex body for region, budgets,

Regional strategy (SIA)



#### Country – wise Energy Boards

Technical feasibility

Factories /Units for Implementation & feedback for results

#### **MYSORE FACTORY - GREEN SUPPLY CHAIN**



- HUL Mysore Unit manufactures and packs 'Instant Coffee' and 'Conventional Coffee' at its state of the art facility.
- The main raw materials used for the product are:
  - a) Raw Coffee Beans
  - b) Roasted and Diced Chicory
- Raw coffee beans are grown in Coorg and Chickmagalore districts of Karnataka and sourced via auction.
- •Roasted and diced chicory is sourced from Jamnagar and Etah district of U.P.
- •Chicory is a tuber, and it is roasted and diced to suit the needs of instant coffee manufacturing.
- •Roasted, diced & ground chicory powder is sourced for the manufacture of conventional coffee.
- •The Unit uses laminate, and pouches as primary packing material and these are sourced from Paper Products Ltd (Hyderabad).
- •CFCs, woven sacks and HMHDPE bags are also used as secondary packing material and are sourced within Mysore/Hosur.
- •The finished product is packed in CFCs and transported to various C&FA situated at different states by trucks. The transported pack mix ensures full loadability to reduce transportation costs.



# EDUCATION AND AWARENESS CREATION

#### **EDUCATION & AWARENESS CREATION**





 Operations will be carried out with care for the environment and will include compliance with all relevant legislation in the country concerned.

We work in line with the UN Global Compact's Principles 7, 8 and 9 on environmental matters, and expect of both ourselves and our suppliers an adherence to all national laws and regulations governing the environment and proper management of resources wherever we or they operate. We actively seek to work with those that do the same; so too, those that go beyond compliance, can demonstrate environmental best practice or continuous improvements.

### SUPPLIER ENGAGEMENT FOR QUALITY IMPROVEMENT

- 1. Project Vertice
- 2. Supplier panchayat
- 3. Supplier University
- 4. Q-Day activities



Public Disclosure: <u>Unilever building partnership with suppliers.</u>

<u>Supplier Guidelines for environmental care.</u>

'HUL believes in educating and creating awareness to its suppliers and vendors on a constant basis to align them to the company's goal in maintaining Safety, Health, Environment and Quality.'



'Supply Panchayats' is a fruitful initiative which results in discussion between the Stake Holders (Units) and the Vendors to sort out issue related to:



A performance appraisal report gives the details of each supplier. Supply Panchayat is also a forum to appreciate/ reward and recognize the best supplier for reduction in wastage, energy and overall cost.

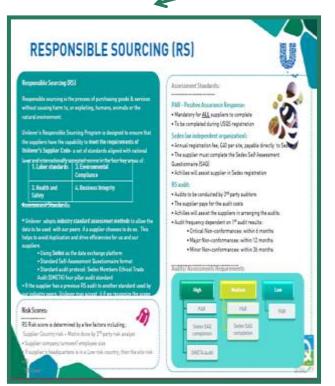
All the strategic suppliers are attend the Supply Panchayat. More than 80 % of suppliers attend the same.



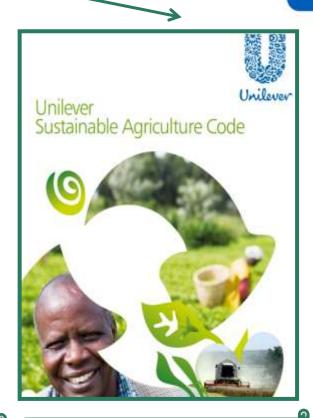
# GREEN PROCUREMENT GUIDELINES

#### **SYSTEMS & PROCEDURES FOR GREEN PROCUREMENT**









Responsible Sourcing

Supplier Quality Approval

Agriculture Code

'All the systems are implemented and in practice in the entire system'



#### UNILEVER SUSTAINABLE PAPER AND BOARD PACKAGING SOURCING POLICY

As part of its corporate vision and sustainability strategy, Unilever is committed to environmental sustainability particularly in the areas of water, waste, greenhouse gas emissions, and sustainable sourcing of renewable materials (including paper and board).

Unilever is a leading consumer goods company buying considerable quantities of wood fibre based materials that are mainly used for paper packaging. We acknowledge we have a role to play, through our procurement practices, in promoting sustainable forest management practices and in helping to put an end to deforestation.

#### Our Principles

- Our aim is to ensure that our paper packaging is either from recycled material or comes from well managed forests and we will buy whichever material is best in order to ensure product quality.
- To achieve this, we will work with our suppliers and other stakeholders to:
  - Progressively increase sourcing virgin paper and board from certified sources with full chain of custody.
  - Promote the expansion of forest certification through our purchasing practices.

#### Our Ambition

- Unilever requires all suppliers to have mechanisms in place to ensure that the paper packaging is made from either recycled fibre or from 'known and legal' virgin fibre sources.
- In addition, suppliers will need to have mechanisms in place to ensure that virgin fibre paper packaging comes
  from forests that are not being converted to plantations or non-forest use, where traditional and civil rights are
  respected, and high conservation values are protected.
- As a further step, we will give preference to virgin paper packaging delivered through acceptable Forest Management Certification Schemes with full Chain of Custody certificates.
- We will work with all of our suppliers to progressively increase the proportion of certified material as larger quantities become available.
- Currently the Forest Stewardship Council (FSC) certification scheme is the most comprehensive Forest
  Management Certification Scheme globally. Wherever it is available and viable to do so, we will give preference to
  sourcing FSC certified virgin paper or board.
- We will, however, also accept paper based packaging from national certification schemes that are brought under the framework of international Forest Management Certification standards (e.g. PEFC) when they are compatible



## Public Disclosure of Green Procurement Guidelines





# EFFICIENCY IMPROVEMENT PROGRAM FOR SUPPLIERS





100 % of the chicory manufacturers/converters are audited.

100 % of the Instant Coffee Suppliers are audited.





#### **SUPPLIER AUDITS**





#### Unilever Quality Knowledge & Guidance

SQA Audit Protocol - 2013

Ref: UQG-34-01

Issue No: 05

Date: 20/12/2012

Page No: 1 of 6

#### SUPPLIER QUALITY APPROVAL AUDIT PROTOCOL – 2013

| Author    | Flávia Marino                     |
|-----------|-----------------------------------|
| Evaluator | Dwiyanto Sutarsono / Alex Gifford |
| Approver  | Lakshmi Sawitri                   |

For Unilever Internal Use Only

ANY COPIES / PRINT-OUTS OF THIS DOCUMENT ARE UNCONTROLLED

Audit Protocol



# RESOURCE INTENSITY REDUCTION IN SUPPLY CHAIN

#### **BASELINES AND TARGETS RM SUPPLIER - MYSORE**



| Raw Material         | Annual<br>requirement in<br>tons | Yield | Waste<br>in<br>tons | Target yield %<br>2013 | Targeted waste in tons | Reduction<br>% 2013 | Target yield %<br>2020 | Targeted<br>waste in tons | Reduction %<br>2020 |
|----------------------|----------------------------------|-------|---------------------|------------------------|------------------------|---------------------|------------------------|---------------------------|---------------------|
| Green bean @ 2009    |                                  |       |                     |                        |                        |                     |                        |                           |                     |
| level                | 12000                            | 45%   | 6600                | 48%                    | 6240                   | 5%                  | 55%                    | 5400                      | 18%                 |
| Chicory @ 2009 level | 4500                             | 70%   | 1350                | 76%                    | 1080                   | 20%                 | 78%                    | 990                       | 27%                 |
|                      |                                  |       | 7950                |                        | 7320                   | 8%                  |                        | 6390                      | 20%                 |

| Sl.no | RM Supplier Projects   | Res   | Activity completion |
|-------|--|---|---------------------|
| 1     | Optimise the roasting std of chicory roots and maximise aqueous extract  | HURC & Etah chicory supplier                            | 2011 end            |
| 2     | Optimise the BBB (black,brown & broken ) ratio @ Green bean supplier end | GB supplier & Procurement team                          | 2013                |
| 3     | Drive energy conservation intiatives at supplier and transport           | Chicory supplier & procurement team                     | 2013                |
| 4     | Help farmers to increse the profitability                                | Procure ment team, HURC + Pant nagar<br>Agri University | On going            |

#### **REDUCTION IN SUPPLIER RESOURCES - MYSORE**



#### IMPROVEMENTS IN AE OF CHICORY CUBES BY OPTIMISING THE DEGREE OF ROAST







DARK ROAST CHICORY TILL MARCH 2012

AQUEOUS EXTRACT % < 70

LIGHT ROAST CHICORY FROM APRIL 2012

AQUEOUS EXTRACT 74 - 78 %

ABOVE ACTION REDUCED FUEL CONSUMPTION
-Bio mass by 76.5 tons per annum

#### **REDUCTION IN SUPPLIER RESOURCES - MYSORE**

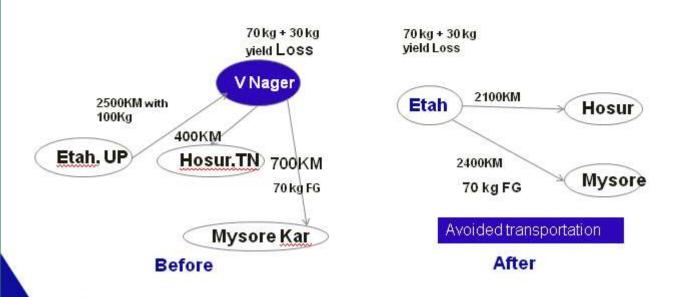


#### TRANSPORTATION OPTIMISATION

R & G powder at Etah — Logistic/ operational Advantages



Started R & G powder at Etah instead of V.N. for logistic



#### **REDUCTION IN SUPPLIER RESOURCES – MYSORE**



#### **RESULTS: TRANSPORTATION OPTIMISATION**

78

#### R & G powder facility at Etah

Total stock at Etah in Raw 5350 T
Assumption-

- 1. Monthly requiment 210 T per Month
- 2. 75% requirement will be met by 3P

Total Saving Every Year in L

| Total Saving based on attached working               |      |
|--|------|
| Powder consumption per year in T                     | 2520 |
| Expected Volume from 3P per year in T                | 1890 |
|  |      |
| Powder Production at ETAH instead of JE Virudhanagar |      |
| Per T saving   | 4137 |

| Environmental friendly                               |        |
|--|--------|
| Roasting at JE virudhanagar                          |        |
| Total Approx KM run required                         | 515250 |
| Roasting at JE ETAH                                  |        |
| Total Approx KM run required                         | 248063 |
| Total KM run Saving by Roasting at Etah              | 267188 |
| Diesel in It   | 89063  |
| Diesel in T  | 72141  |
| Energy from diesel ( @43GJ/Kg)                       | 3102   |
| CO2 @75kg/GJ in T                                    | 232.96 |
| We will able to reduce approx Carbon Foot Print in T | 232.96 |

#### Conclusion--

- 1. Source of RM is in Etah so it will be better to Roast & Grind at Etah and then send it to MYS/HSR.
- 2. Process Loss are high in R & G powder (30%) so it will straight forward give us 30% saving in freight cost.
- 3. Storage cost is low competitive as compare to Virudhanagar/HSR/MYS.
- 4. Approx 79L per year saving will be there even at 75% requirement produced at Etah.

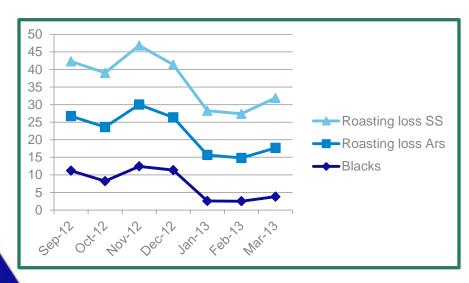
#### **REDUCTION IN SUPPLIER RESOURCES**

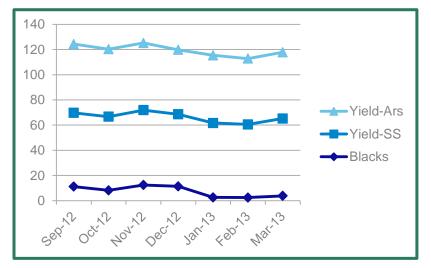


#### **GREEN BEANS BBB REDUCTION (IN PROGRESS)**

| Blacks V/S Roasting loss |        |                     |                  |  |  |  |
|--------------------------|--------|---------------------|------------------|--|--|--|
| Month                    | Blacks | Roasting loss Aurus | Roasting loss SS |  |  |  |
| Sep-12                   | 11.19  | 15.53               | 15.57            |  |  |  |
| Oct-12                   | 8.219  | 15.39               | 15.44            |  |  |  |
| Nov-12                   | 12.43  | 17.57               | 16.83            |  |  |  |
| Dec-12                   | 11.36  | 15                  | 15               |  |  |  |
| Jan-13                   | 2.574  | 13.08               | 12.61            |  |  |  |
| Feb-13                   | 2.5    | 12.33               | 12.56            |  |  |  |
| Mar-13                   | 3.8    | 13.86               | 14.23            |  |  |  |

| Blacks V/S Yield |        |          |           |  |  |  |
|------------------|--------|----------|-----------|--|--|--|
| Month            | Blacks | Yield-SS | Yield-Ars |  |  |  |
| Sep-12           | 11.19  | 58.53    | 54.55     |  |  |  |
| Oct-12           | 8.219  | 58.49    | 53.56     |  |  |  |
| Nov-12           | 12.43  | 59.46    | 53.3      |  |  |  |
| Dec-12           | 11.36  | 57.21    | 51.21     |  |  |  |
| Jan-13           | 2.574  | 59.13    | 53.71     |  |  |  |
| Feb-13           | 2.5    | 58.05    | 52.24     |  |  |  |
| Mar-13           | 3.8    | 61.45    | 52.56     |  |  |  |





#### GSC C 6.2 REDUCTION IN SUPPLIER RESOURCES

'A research project with Panth Nagar Agriculture University at Panthnagar (Uttarakhand), to increase the farmer profitability and reduce water & fertilizer consumption.'









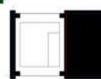
#### Ink Optimization (Implemented in 2011)



 White inkremoval in the back panel o all the LUP structures.



- Registered white ink brought cost saving advantage
- Savings of 7.18T in white ink.



#### Optimization of Laminate

(Implementation in 2013)

- Structure optimization of LUP laminates (Rs 1,2,3,5&10).
  - Existing structure is 10 pPET / 7 pFed / 30 pPely
  - New Structure is 8 ppgT / 7 pFod / 30 pPdy
- Laminate savings of approx 116T



#### Machine platform- single to Twin track

(Implemented in 2012)

- Productivity increase by 85%.
- Energy savings of 34%.
- Removal of the Inkjet coding on the back panel
- Replacing the inkjet with Embossed type of coding





**Other Initiatives** 



## Q/A

## 5 minutes

Thanks