COMPLETE TRUST





- World's leading inspection, verification, testing and certification company
- Experts at:
 - Providing competitive advantage
 - Driving sustainability
 - Delivering trust
- 64,000 employees, including:
 - Scientists, engineers, doctors, chemists, auditors and inspectors
- 1,250 offices and laboratories globally

SGS OUR VISION



- We aim to be the most competitive and the most productive service organisation in the world.
- Our core competencies in inspection, verification, testing and certification are being continuously improved to be best-in-class. They are at the heart of what we are.
- Our chosen markets will be solely determined by our ability to be the most competitive and to consistently deliver unequalled service to our customers all over the world.

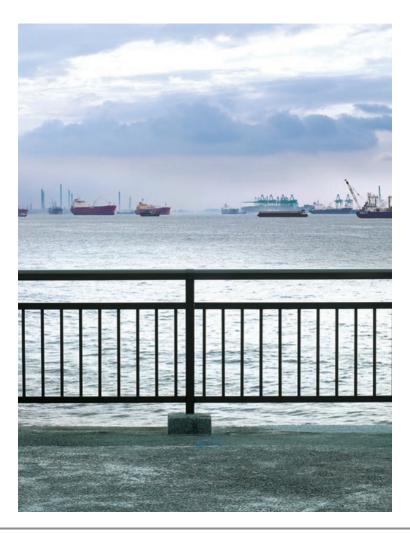




- Passion
- Integrity
- Entrepreneurship
- Innovative spirit



SGS WORKING ACROSS INDUSTRIES AND GEOGRAPHIES

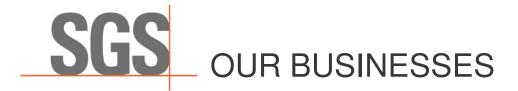


- Inspection
- Verification
- Testing
- Certification

SGS OUR HISTORY



- Founded in 1878 as a grain inspection company
- Expanded beyond agriculture in early and mid 20th century to:
 - Minerals
 - Oil, gas and chemicals
 - Consumer goods
 - Industrial sector
- Listed in 1981
- Growth and diversification continued throughout last half of the century
- Current structure of ten business units initiated in 2001



- Consumer Testing Services
- Agricultural Services
- Minerals Services
- Oil, Gas & Chemicals Services
- Life Science Services
- Systems & Services Certification
- Industrial Services
- Environmental Services
- Automotive Services
- Governments & Institutions Services



SGS WE BUILD TRUST THROUGHOUT SUPPLY CHAINS











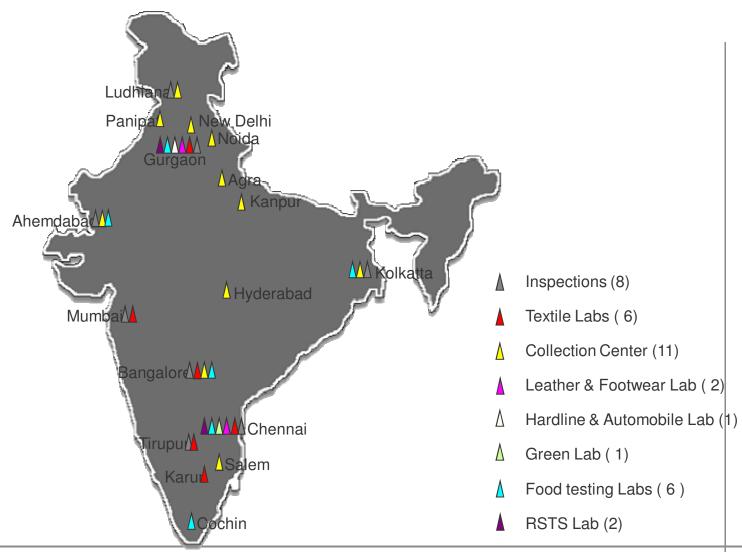


SGS SGS IN INDIA



- Founded in 1950
- Approx 3300+ employees
- Inspections ISO 9001:2000 Certified
- Laboratoires ISO 17025 Certified
- All SGS business lines are represented
- Registered office in Mumbai
- CTS Head quartered in Gurgaon
- 05 Textile Laboratories
- 02 Hardline Laboratories
- 02 Ecotesting Laboratories
- More than 800 employees in CTS







SGS PRODUCT SECTORS - SOFTLINES



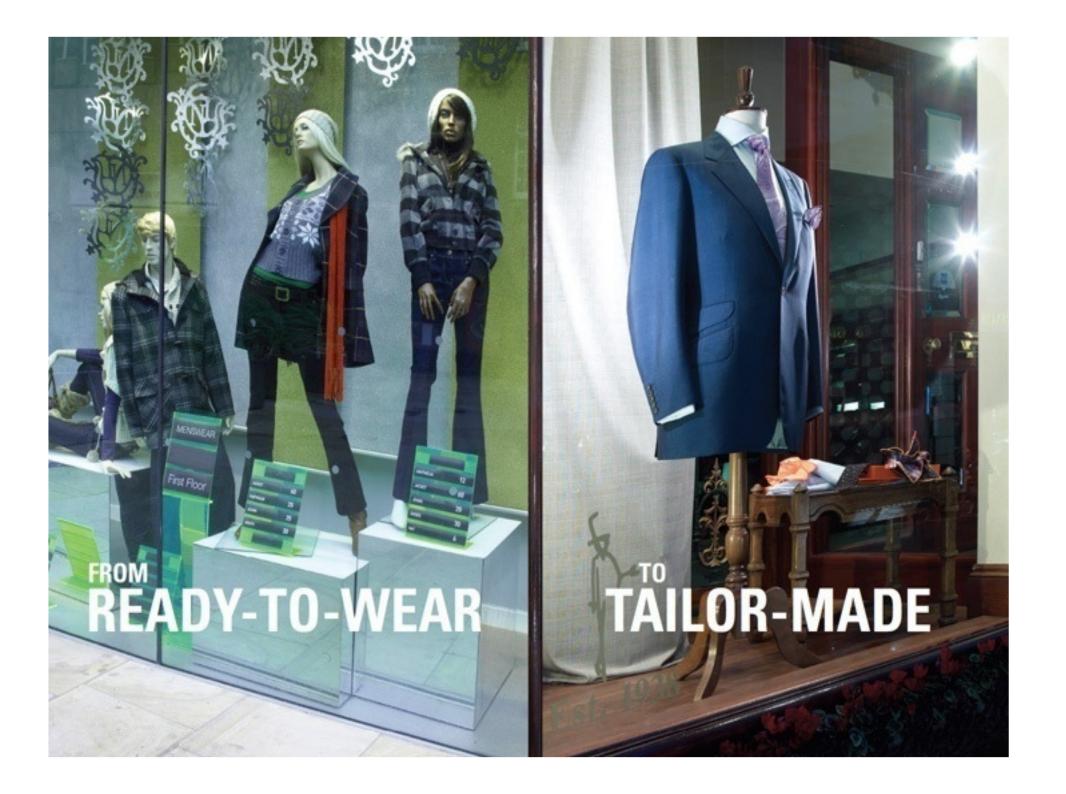
- Footwears
- Leather & Leather Products
- Personal Protective Equipments
- **Apparels**
- Home Textiles
- **Functional Clothing**
- Yarns/ Fibres
- Mechanical Contraceptives







- Footwear Testing
- Leather Testing
- Chemical/RSTS/RoHS Testing
- Physical Testing
- Home Textiles Testing
- Functional Testing





CONSUMER TESTING SERVICES

SGS MEANS SUSTAINABILITY

Customer challenges:

- Reducing quality, social and environmental risks
- Eliminating defects at early stages of production
- Ensuring quality, performance and compliance with local and international requirements
- Achieving a faster time to market, avoiding regulatory and non-compliance bottlenecks
- Managing social and environmental impacts of products throughout lifecycle
- Substantiating product claims to maintain a competitive edge

For example:

- Product recalls
- Demonstrating sustainability

Our key services:

- Product testing, certification, verification, inspection and assessment
- Supplier audits and consulting services to the Electrical & Electronics, Textiles, Footwear, Hardlines and Food sectors

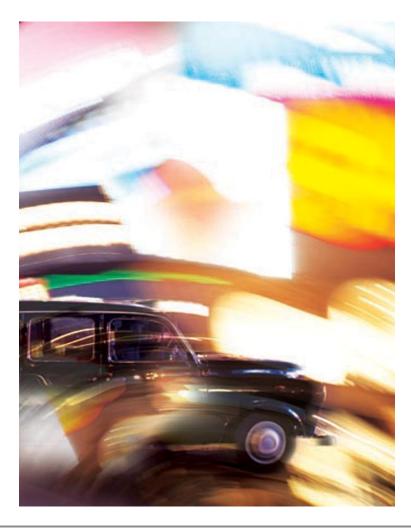
SGS CASE STUDY



- Product recalls and loosely controlled supply chains hurt everyone:
 - Help our customers reduce the scale and impact of recalls, trace products
 - Ensure that the proper procedures are put in place to minimise the possibility
- Demonstrating sustainability:
 - Consumers obviously expect to buy healthy and safe products
 - Eco-labelling and eco-design
 - Supply chain management against CSR principles



SGS DELIVERING COMPETITIVE ADVANTAGE



- Enhancing quality
- Reducing risk
- Improving productivity
- Ensuring compliance





- Working across industries
- Thinking globally
- Acting locally
- Covering supply chains
- Using the right technology
- Culture of integrity

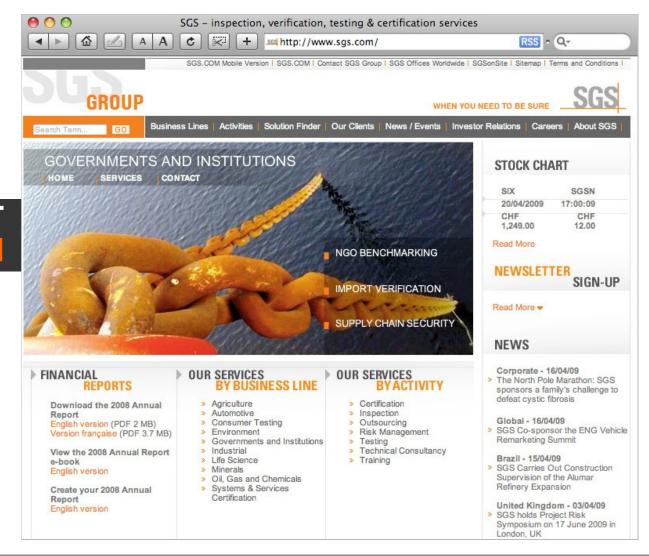


SGS RELY ON OUR MOST IMPORTANT ASSETS



- Our People
- Our Expertise
- Our Commitment







SUSTAINABILITY SOLUTIONS SUPPLY CHAIN MANAGEMENT FOR THE FOOT WEAR INDUSTRY ENSURING A GREENER FUTURE

Dr Varalakshmy Chaudhari Manager Sustainability

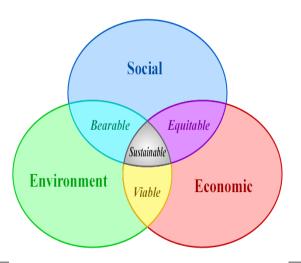




Sustainability is "the ability of an ecosystem to maintain ecological processes, functions, biodiversity and productivity into the future.







SGS is the world's leading inspection, verification, testing and certification company. Recognized as the global benchmark for quality and integrity, we are continuously developing new service offerings to meet the challenges of achieving business excellence.



SGS has developed a complete line of services to support your sustainability strategy and address key issues in 3 major areas:

- Restricted substances management
- Social accountability
- Ecodesign



FOR A SUSTAINABLE SUPPLY CHAIN

Combining our testing, inspection and auditing experience with our consultancy services, we support you in :



- Mapping out the best adapted Corporate Social Responsibility strategy,
- Assessing the environmental & economic impact of products, packaging and services,
- Certifying procedures and systems against international or local standards
- Selecting the KPI, methods and specific tools,
- Recommending action plans to improve the products and the organization,
- Helping and monitoring your suppliers to ensure they comply with your requirements.



SUSTAINABILITY SERVICES

A dedicated range of solutions for consumer goods

SGS Sustainability Services

Social Responsibility

- Social Audits
- Anti-bribery prevention

REACH

Restricted substances management

Ecodesign

- Product environmental assessment
 - LCA
 - Product Carbon Footprint...
- Management solutions
 - Eco-innovation Management
 - Green procurement
- Product solutions
 - Labelling and green claims verification
 - Ecodesign of packaging

- SVHC testing
- REACH only representative
- SIEF and Third party representation
- Safety data sheet



SOCIAL RESPONSIBILITY SOLUTIONS



We also secure our clients' organizations and supply chains beyond social compliance with new audit and training schemes



■ Anti Corruption & Bribery prevention

- Highlight companies' commitment to bribery prevention
- Effectiveness of policy implementation programs
- Audits are conducted against international best practice & relevant national / international laws



Environmental audits

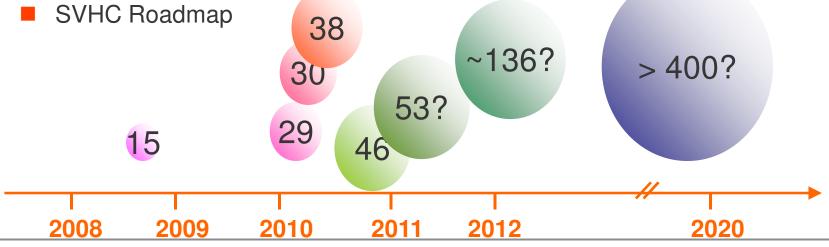
- Evaluate environmental pollution generated by factories
- Duplicate environmental audit approach to industrial risk
- Audited points
 - Air emissions
 - Soils and water pollution
 - Noise
 - Waste treatment





REACH SVHC & "INFORMATION IN SUPPLY CHAIN"

Revision Date	Details
28 October 2008	15 SVHC Candidate List published
13 January 2010	14 additional SVHC added to SVHC Candidate List
30 March 2010	Acrylamide was added into the SVHC Candidate List
18 June 2010	8 chemical substances added to the SVHC Candidate List.
15 December 2010	8 chemical substances added to the SVHC Candidate List. The Candidate List has reached 46 SVHC.
21 February 2011	7 SVHC under public consultation



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RESTRICTED SUBSTANCES **MANAGEMENT**



- Eu format sds
- SVHC risk assessment services
- Communication under article 33 document preparation
- SVHC full screening (reporting)
- Material analysis report

- **Alternative** suggestion report
- Reach e learning
- Reach training service
- Reach audit
- **SVHC** testing
- RS testing





SVHC MANAGEMENT



How to prepare for managing SVHC?

communication in the supply chain. obtain a declaration from the manufacturer or supplier the article or component stating that there are no SVHCs in their product

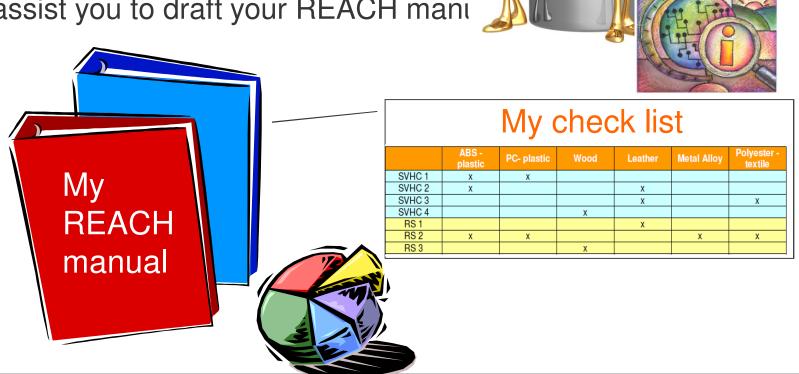
supplement declarations with surveillance testing, auditing, self-assessment questionnaires

narrow down the number of SVHCs in that article (e.g. public information, the manufacturing process, product standards etc.). To exclude the presence of certain substances and make a target list.



TAILOR MADE TEST STRATEGY

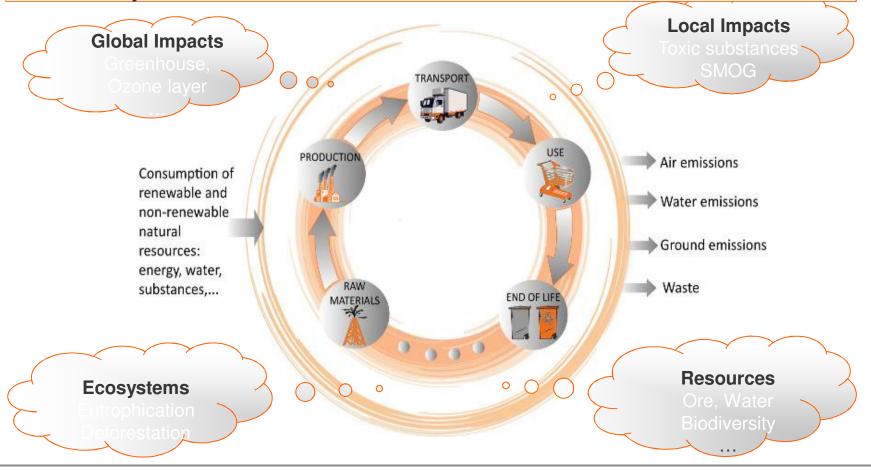
- **According to your product scope**
- ✓ Supply chain conditions
- **Budget and management strategy**
- → assist you to draft your REACH manu





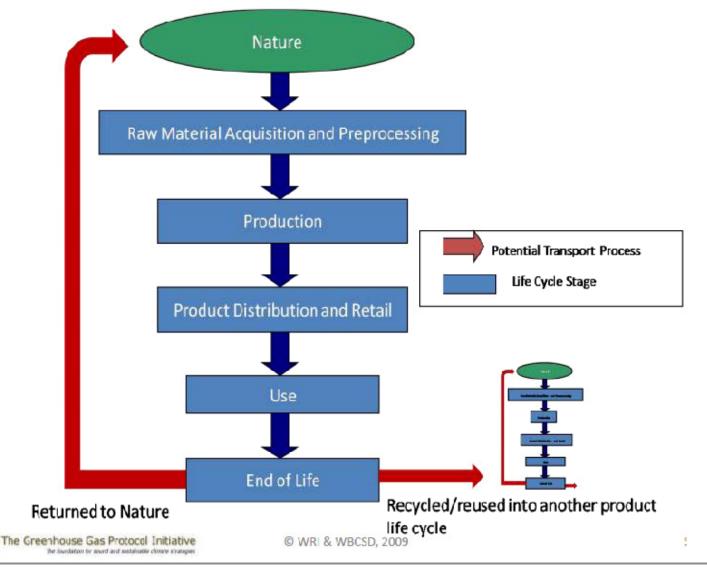
ECODESIGN - LIFE CYCLE ANALYSIS THINKING

Life Cycle Analysis (LCA) is a technique to assess the potential environmental impacts associated with a product (or service) throughout its life cycle. ISO 14040





SGS SCOPE OF PRODUCT CARBON FOOTPRINT





- SGS has strong expertise in global supply chain auditing
- These services can be combined with carbon footprint studies to gather information from the supply chain
- Self-assessment questionnaires sent to suppliers on energy use/emissions
- Global audit team for onsite audits, training and awareness
- Implementation of reduction plans onsite



SGS SCENERIO





Average tannery generates 5kg of organic waste, consumes 160l of fresh water and emits around 0.8kg of CO2 in order to produce 1 kg of grain leather.

only some 15% of the originally applied chemicals end up in the final product,

As per Leather Working Group audit protocol a reduction of 45% in water consumption and 60% in energy is possible ions. These process optimisations don't necessarily add additional cost; A green technology pays back in a very short time.

The lyophiliser patented by Central Pollution Control Board (CPCB) enables salt-free preservation of hides. Reduces amount of water used.

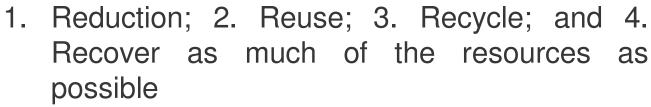


LCA OF LEATHER PRODUCTION



In Life Cycle Assessment (LCA) the entire manufacturing chain is evaluated starting from the farm and the production of chemicals up to the end of the working life span of a leather article.

Four 'R' principles of green manufacturing





Mr Raghava Rao and a group of researchers at the CLRI in Adyar have found by reversing the order of tanning and post-tanning steps could cut the amount of chemicals released by 82% and increase energy efficiency by 40%, .



EU SPONSORED LCA STUDY IN ITALY AND FRANCE



- Eu sponsored a study of LCA of bovine leather manufactured in Italy and Spain to identify the economic and environmental improvements which can be achieved by companies in the leather industry
- LCA characterisation of phases as slaughter house, storage, tannery, tannery solid waste management, tannery waste water treatment, chrome recovery were studied
- Tanning has maximum impact in all categories. Among the tanning raw materials the most contributing one The chrome recovery leads to an environmental credit



ECODESIGN SERVICES: Green manufacturing?...

At one end, key concern for vendors to propose "green products"...



- There is no standard definition for "GREEN"
 - Material selection
 - Product design (R&D)
 - Packaging optimization
 - Factory Management (Environmental Management System)
 - Greenhouse Gas Emissions
 - Energy Efficiency
 - Social responsibility
- We help our clients to identify their priority and design the product evaluation criteria

VOLUNTARY INITATIVES						
Ecolabel Ecoflower	 Applies to range of products; incorporates LCA and sets product specific standards 					
	 Verification of compliance required through testing/audits 					
Product Carbon labelling	 Carbon Trust PAS 2050 standard and carbon reduction label 					
working with the Cerbon Trust	 Product Carbon Footprint (PCF) initiative, Germany 					
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Japan Carbon Label Scheme - 2008					
_	 ISO 14067 development: harmonisation of carbon methodologies globally 					
Sustainable raw material	Timber - FSC certification considered best practise					
certifications (FSC)	 Sustainably sourced food raw materials e.g. Rainforest certified coffee, fair trade and organic products 					
Sustainability Consortium	Lead by Walmart					
(USA)	Sets sustainability criteria for suppliers (self-assessment)					
	Develops life cycle data database from supplier environmental					
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At the other end, buyers want to be sure they buy "green products"...





- They need a green procurement policy
 - To understand the evolution of production modes with environmental concerns
 - To develop their own "green products" category with less environmental impact
 - To protect their brand from NGO's attacks
 - To anticipate future regulation and voluntary initiative
 - To secure their communication about their green products

Eco-friendly raw material sourcing

- Purchase organic cotton (Levi's, Patagonia, H&M, Timberland)
- Use recycled polyester (Levi's, Nike, Timberland)

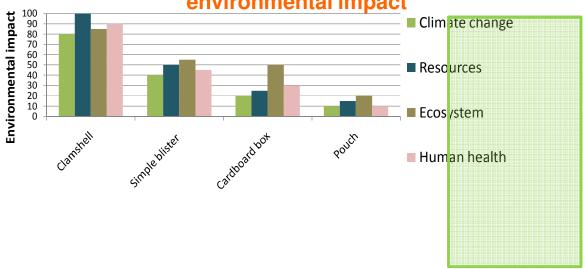


ECO PACKAGING

EVALUATE THE ENVIRONNEMENTAL IMPACT OF YOUR PACKAGING

- An efficient tool to:
 - Identify and manage the main environmental impacts of a packaging (LCA)
 - Compare the impacts of several packaging solutions (blister, cardboard box, double blister,...)







ECODESIGN SERVICES: Carbon footprint

Carbon footprint is the total set of greenhouse gas emissions caused directly and indirectly by an [individual, event, organization, product] (Carbon Trust)





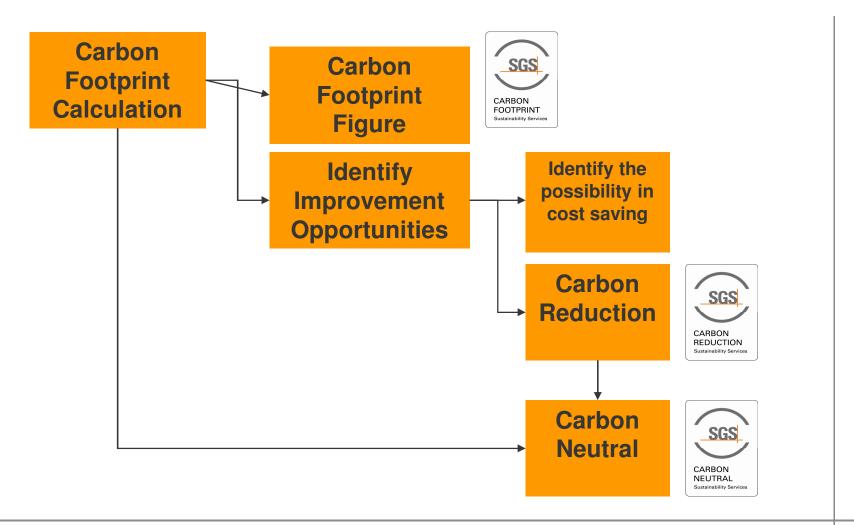


CARBON **NEUTRAL** Sustainability Services

- Greenhouse gases Carbon dioxide Methane

 - **HFCs**
 - PFCs etc.
- Measure carbon footprint to manage and reduce company's business impact
- Develop a reduction strategy
 - Technological developments
 - Better process and product management
 - Changed Green Public or Private Procurement (GPP)
 - Product's improvement
 - Green manufacturing and energy management
 - Involvement of supply chain and customers







EU REGULATION ON CLIMATE CHANGE

- EU countries: Carbon Reduction commitment widens emissions trading to more companies than currently included in EU-ETS (20 % Reduction by 2020)
- FRANCE: From July 2011, all consumer products must have environmental indicators (pilot phase).
- UK: Climate Change Bill sets 2020 and 2050 CO₂ reduction targets in primary legislation
- GERMANY: RED-Renewable Energy Directive (EU commitment 10 % bio-energy transport and 20% Renewable Energy by 2020) Carbon & Sustainability Performance & Reporting in bio-energy production
- USA Climate change bill



SGS NATIONAL INITIATIVES IN EUROPE

France (Obligatory)







Germany



UK

Swiss

Sweden







Korea



Taiwan



SUSTAINABLE COALITION

- Sustainable coalition of leading apparel and footwear brands, are driving a new initiativeTo improve sustainability across the entire apparel and footwear sector.
- To develop an industry-wide index that measures everything from water and energy use to greenhouse gas emissions, waste, and labour practices
- to reduce the environmental and social impacts of products from change in design, production, recycling.
- Companies: Nike, Patagonia, Gap, Levi strauss, M&S,
 Arvind Mills, C&A, Esprit, JC Penny, Kohls, Li& Fung,
 Tal apparel, Timber land, VF corpn



CONSIDERATIONS FOR LCA / PCF



- REDUCTION from baseline

- Climate change
- Energy & cost saving
- Reduce business impact
- Brand promotion
- Meet regulations

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Economy

Sustainable design (product and store)

Green Sourcing and **Packaging**

Encourage Fair Trade

Technology Sharing

Social

Safe and fair working management in supply chain

Respecting diversity

Community investment

Environment

Work on climate change Eg Reduce green house gases

LCA, Product carbon foot print

Supply chain environmental

practice management

e.g. Clean water system,

RS control

Recycling

Waste Reduction



SGS COMPARISON OF THE SUSTAINABILITY STRATEGIES

<u>Economy</u>	GAP	nike	HaM	PUMA.	Jey in	TIMBERLAND OUTDOOR PERFORMANCE	patagonia	Next	RIPCURL
Sustainable design	•	•	•	•		•	•	•	•
Technology sharing beyond suppliers from different Countries				•			•	•	
Encourage fair trade			•			•	•		
Develop green product line					•	•	•		



SGS Comparison of the Sustainability Strategies

<u>Social</u>	GAP	nikė	HaN	PUMA.	JOV-18	TIMBERLAND	patagonia	Next	RIPCURL
Safe and fair working environment in the supply chain	•	•	•	•		•	•	•	•
Respecting diversity	•				•			•	
Community investment	•		•	•			•	•	•
Educate customers/ suppliers		•	•	•	•	•	•		

SGSTRATEGIES TRATEGIES

<u>Environmental</u>	GAP	nike.	H₄M	PUMA.	SP COL	TIMBERLAND® OLITOORI FERFORMACE	patagonia	Next	RIPCURL
Work on climate change	•	•	•	•	•	•	•	•	•
Energy conservation	•	•	•		•	•	•	•	•
Waste Reduction	•		•	•	•		•	•	•
Supply chain environmental practice management (e.g. RS control, wastewater treatment)	•	•	•	•	•	•	•	•	•
Recycling	•		•		•	•	•	•	•
Bluesign		h	luesign ^a						

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TIMBER LAND SHOES

EARTHKEEPERS™ PRODUCT LINE

Earthkeepers™ is a line of premium Timberland® footwear and apparel product that reflects our commitment to "Make it better". Beginning in 2008, Timberland® product with the Earthkeepers™ label must meet design criteria around recycled, organic and renewable material content. Sevent free adhesives and respect of line at impact.

Our Mountain Sneaker utilizes earth-conscious materials and construction methods. It includes:

Smartwool® fabric lining made from sustainable, biodegradable merino wool.

Organically tanned, premium full grain leather and fast-growing hemp.

Vibram® EcoStep® outsole made with 30% recycled rubber.

Shop more Earthkeepers™ products

- Timberland, shoe company assessed the carbon footprint of 40 of the shoe models it currently sells.
- Flip-flops 22 to 44 pounds,

Shoes 66 p to 132 pounds.

Hiking boots t 154 and 198 pounds,

- transportation accounts for less than 5% of the carbon footprint.
- Timberland's Winter Park Slip On Boot. casual boots at 121 pounds per pair. Of total, 8.5 pounds comes from the electricity used to make the boots and 112.5 pounds comes from the raw materials used to make the shoe: rubber for the outsole; EVA, for the midsole; and leather for the upper.



EXAMPLES- E LEATHER ACCESSORIES





- The leather used in the production of E-Leather would normally go to landfill.
 A high-pressure water jet process uses no chemicals in the entangling process.
 The manufacture of E-Leather, is a continuous closed-looped system, which recycles all water used
- The carbon footprint is reduced, as the oil-based adhesives used in conventional bonded leather have been removed from the process. Product emissions of solvents are thermally oxidated and the energy generated is fed back into the manufacturing process.



SGS, GLOBAL PARTNER FOR SUSTAINABILITY

Combining our testing, inspection, certification experience with our sustainability services, we support our clients in their sustainable development strategy

Sustainability Services

- Social responsibility
- RS regulations as REACH
- Ecodesign Services
- Product carbon foot print
- Life Cycle Analysis
- Green Packaging
- Green Manufacturing
- Green Claim Verification



A WIDE RANGE TO COVER ALL THE NEEDS

Organisation

Product & packaging

Supply chain management

Consulting

- CSR risk assessment
- Design of CSR policy & procedures
- Training and awareness

Ecodesign

- Life Cycle Analysis (LCA)
- Carbon footprint
- Ecoefficiency
- Green labelling

- CSR risk assessment
- Carbon footprint
- Cost saving
- Supply chain management optimisation

Testing



- Restricted substances
- REACH compliance dossier
- Biodegradability, recycled materials
- Production testing protocol
- Verification of vendor self assessment
- Products benchmark on the shelf

Audit verification

Verification of CSR policy & procedure implementation







CSR monitoring: social audits, carbon footprint, green manufacturing...



GLOBAL SUSTAINABILITY TEAM

- Mr Charles Ly Wa Ho
- Ms Bethani Murray- London
- Jean Bapitiste Molet France
- Yolima Fauchet -- France
- Danny Wong- Hong kong
- William Lin Hongkong
- Ke Yang USA

"GREEN" PRODUCTS? WHEN YOU NEED TO BE SURE...

http://www.sustainability.sgs.com/



Thank you varalakshmy.chaudhari@sgs.com 09324264318