

WORLD LEATHER

THE WORLD'S NO.1 MAGAZINE FOR THE LEATHER INDUSTRY

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Volume 35, Number 6



Biodegradability bonus
Raw material: Mongolian pastoral
LCA's highs and lows
What now for Tom Ford?



LEATHER ^{AND} HIDE

COUNCIL OF AMERICA

BACKTRACK. AT WORK ACROSS THE SUPPLY CHAIN.

Leather's sustainability credentials are critical to our industry's future.

Today sustainability is tied to traceability, as customers and consumers alike ask not just 'where has it come from' but 'what is its impact' and 'how is it being managed'. Answering these questions is central to addressing ESG concerns.

WHERE: WITH NO MANDATORY ANIMAL IDENTIFICATION SYSTEM OR GOVERNMENT TRACEABILITY SYSTEM FOR HIDES, PRODUCT CLAIMS ARE SUPPORTED BY PRIVATE SECTOR SOLUTIONS.

L&HCA is working with the U.S Department of Agriculture to provide independently certified traceability back to packing or processing point of origin.

WHAT: THERE ARE WILDLY DIFFERING VIEWS ON THE ENVIRONMENTAL IMPACTS OF OUR INDUSTRY AND SUPPLY CHAIN, FUELED BY A LACK OF HARD DATA.

L&HCA is developing the data resource to enable a full Life Cycle Assessment for US hides. This will enable quantification and evidencing of actual impacts.

HOW: THE US INDUSTRY CONTINUES TO INVEST IN SETTING THE SUSTAINABILITY BENCHMARK. WE NEED TO EVIDENCE THIS GOOD PRACTICE.

L&HCA works with the industry partners to help assess, quantify, certify and support ESG investment, across the leather value chain.

Together we can enable our customers to make an informed, sustainable, and natural choice, with absolute confidence.

LEATHER & HIDE COUNCIL OF AMERICA: usleather.org

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Cover image: The Longchamp armchair developed by furniture manufacturer Echevarria France, uses leather from Tannerie Sovos France.

CREDIT: ECHEVARRIA/TANNERIE SOVOS



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FRANCE Footwear brand Paraboote released a limited-edition of its Yosemite boot in January in partnership with a niche creative label called Classic Paris. The boots were available to buy for one week only at Classic Paris's studio in the French capital's Le Marais district. The boots were made from vegetable-tanned natural leather and had no other treatment. A mobile print-shop gathered plants from the fields around the Paraboote factory near Grenoble, used the plants to make ink and used the ink to print on site the boxes for each pair.

SWEDEN A recent survey of the buying intentions of wealthy consumers for 2023 suggests that the luxury sector will continue to thrive. According to the survey, commissioned by Stockholm-based research firm Altiant, people in the top 5% of household income bracket envisage an increase in their spending on luxury goods and services in 2023. The survey targeted respondents aged between 18 and 60 in the US, China, Germany, France, Italy and the UK who have purchased a luxury item or service in the past year.

PORTUGAL Portuguese leather industry association APIC hosted a two-day seminar event in Alcanena on January 19 and 20. Under the banner 'Leather Days', APIC programmed a series of talks with a focus on the wider leather industry in some cases and, specifically, on the industry in Portugal in others. The general secretary of APIC, Gonçalo Santos, gave a presentation on a project called In-Leathers, through which the organisation will seek to secure a higher level of business outside Portugal in 2023 and 2024.

ITALY A recent survey commissioned by industry body Assopellettieri has found that Italy's leathersgoods sector, in the first nine months of 2022, recorded an increase of 8.6% in sales in the domestic market and export growth of 15.7%. Overall, turnover rose by 14.7% year on year and production increased by 9.2%. However, commenting on the survey, the president of Assopellettieri, Franco Gabbrielli, said he was concerned about the outlook for 2023. He cited rising energy costs, uncertainty in China following a rise in covid cases, and the predictions of looming recession in western countries.

COLOMBIA The Colombian Association of Footwear, Leather, and Manufacturing Industries (ACICAM) is preparing a new edition of the International Footwear & Leather Show (IFLS) and the International Exhibition of Leather and Supplies, Machinery and Technology (EICI). These shows will be held simultaneously from January 30 to February 2 at the Corferias venue in Bogotá. The events will have more than 220 footwear and supplies exhibitors. Around 8,000 national buyers and 250 from overseas are expected to attend.

BRAZIL Brazil's tanners and packers earned just over \$1.2 billion from exports of leather, hides and skins in 2022, industry organisation CICB has reported, a fall of 13.8% compared to 2021, but an increase of almost 25% compared to 2020. In terms of volume, CICB has calculated exports of 140.75 million square-metres, down on the previous year by 18.3% and on 2020's figure by 17.9%. Exports of finished leather contributed by far the biggest share of the 2022 total value, with \$690 million, down by 12% year on year.

SENEGAL Luxury brand Chanel took its celebration of craftsmanship and artisan skills to Africa in mid-December, presenting its most recent designs from the LVMH group's wider Métiers d'Art programme in the Senegalese capital, Dakar. Events centred on a new arts space, 19M, which opened to the public in January. Chanel used the space to shed light on the skilled work of its own craftspeople and also gave local artisans a chance to display their work.

JAPAN Japan's Leather and Leathergoods Industries Association (JLIA) hosted six Japanese brands at a national stand at Pitti Uomo in Florence from January 10-13. It said the six brands that took part stood out as industry leaders in Japan because of the high quality of their designs and the quality of the products that they had on show at Pitti Uomo. The six brands were Kado-Press, Kanpekina, Numero Uno, OAO Footwear, Regal and The Shoe of Life by H Katsukawa.

US Packers, traders and tanners shipped a total of 28.4 million hides from the US to overseas markets in the first 11 months of 2022, bringing in export revenues of just under \$1.2 billion. These figures confirm a contraction that was evident throughout 2022. Export volume for the January-November period was down by 11.2% year on year. In terms of value, the decline was 7.5%.

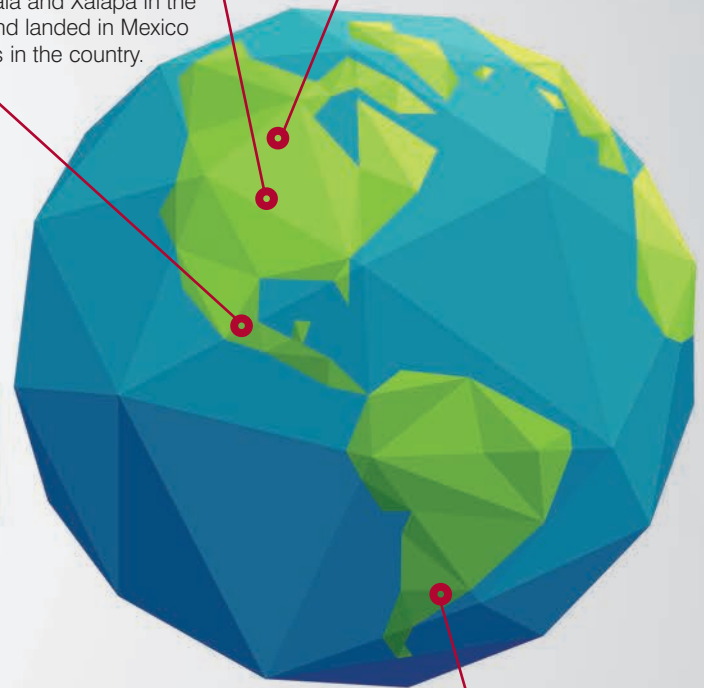
MEXICO VF Corp brand Timberland closed 2022 with the inauguration of a new flagship store in Mexico City, a 431-square-metre space on three levels and a terrace. This new opening is part of Timberland's expansion plan in Mexico, which added seven new stores in Guadalajara, León, Tlaxcala and Xalapa in the last four months of 2022. Timberland landed in Mexico in 2014 and currently has 42 stores in the country.

CANADA Figures from a study in Canada suggest that grasslands that have cattle grazing on them capture substantially more carbon than cattle-free land. Funded by the provincial government, the Saskatchewan Research initiative (SRI) is examining the capacity of grazing practices to enhance carbon capture. Results so far indicate that grasslands with cattle capture 12% more carbon than those without.



CHINA According to the Chinese Association of Automobile Manufacturers (CAAM), sales of electric vehicles (EVs) rose to 5.4 million units in 2022, up by almost 82%. China's overall sales increased to 26.9 million units, including trucks and buses, indicating a growth rate of 2.1% compared to 2021. CAAM reported that sales of SUVs, family cars and minivans, (EVs and petrol-powered), reached 23.6 million units in 2022. However, sales tailed off in December as a consequence of fresh covid restrictions.

MACAU Leather manufacturing group ISA TanTec has said its newest business unit, Creation Of Sustainable Materials (COSM) has become "a solid pillar", supporting the group's growth and sustainability initiatives. COSM's focus is on bio-based materials that offer an alternative to plastic-based synthetics. ISA TanTec has said this business unit complements its leather manufacturing by making sustainable materials available to brands that want to offer non-leather shoes and bags.



AUSTRALIA The country exported 860,000 tonnes of beef in 2022, a decline of 28,000 tonnes compared to 2021. This means 2022 was the third consecutive year of decline, in spite of a record export figure for the month of August in isolation. In addition, the figure for 2022 is the lowest yearly volume since 2003.

ARGENTINA Feedlot losses in Argentina since September have continued increasing to reach a record of almost \$110 per animal, according to a report from an industry organisation that represents 94 feedlot establishments. Losses incurred are because of supply and demand problems, higher feed costs, exchange rates and the high price of calves compared to the stagnation of steer prices.

NEW ZEALAND The country's leather industry could be in line for a boost in exports to China as trade relations between the two countries become stronger. According to the latest figures, trade between the two had a value of \$23.4 billion in the first 11 months of last year, an increase of 3.2% year on year. Timber, dairy, leather, fruit, meat, pulp and raw materials for textiles are New Zealand's main exports to China. Clothing, machinery, vehicles, trains, telecommunication equipment, computers, furniture, toys and sporting goods make up most of China's exports to New Zealand.

Welcome return to Chennai for TFL

Leather chemicals manufacturer TFL has said it will be pleased to attend the India International Leather Fair once again following a hiatus of two years, caused by covid-19. The 2023 edition of the fair takes place in Chennai from February 1-3.

TFL said it would have “a special collection of premium leather articles” on display at the event. It will display leathers for accessories, garment and footwear and will also seek to introduce to tanners in India a series of technical innovations it has worked on since the last time the fair ran.

These will include Pure Tec, a complete range of bio-based, low-impact chemicals for leather production, and a newly developed range of low bisphenol syntans.

Oeko-Tex issues updated guidelines for 2023

Switzerland-based testing, labelling, and product certification provider Oeko-Tex has published comprehensive new guidelines regarding chemicals used in the leather industries, which will apply in 2023 after a transition period.

For example, Oeko-Tex has issued a general ban on the use of perfluorinated and polyfluorinated alkyl substances (PFAS/PFC) in leather, footwear and textiles.

Other important changes to the Oeko-Tex regulations are substances that have been reclassified as Substances of Very High Concern (SVHC). This reclassification primarily concerns the antioxidant drometrizole and the chemical compound N-ethyl-2-pyrrolidone.

Ecco Leather stock available to all

Leather manufacturer Ecco has launched a new initiative to attract the public and emerging designers to leather and to help prevent its materials from going to waste.

It has opened EL3 Vault, which it has described as an online “stock shop” that is open for anyone who wants to buy small quantities of leather from its collections.

School-age children to benefit from United Chemicals project

Leather chemicals manufacturer United Chemicals has announced a social project aimed at helping children as part of its efforts to mark its thirtieth anniversary, which the Turkish company is celebrating in 2023. The project, ‘We Are United’, has children of school age, mainly girls, as its main focus. The company will work with non-profit organisations on initiatives that aim to reduce educational inequality around the globe.

Specific projects that the chemicals manufacturer hopes to complete in the first

Educating the consumer is paramount for Leather UK

Industry representative body Leather UK has launched a new labelling project, offering swing-tags that say ‘Leather for Life’ for finished-product brands to use. In consumer research it carried out in 2022, Leather UK found that only 24% of respondents knew that leather was a by-product of the meat and dairy industries. The remaining three-quarters displayed confusion and poor understanding about the origin of leather.

The ‘Leather for Life’ swing-tag project is a response to this; the new labels are intended as an educational tool to share the facts about leather, tanning and the leather sector. Each tag contains a QR code that links to a section on the Leather UK website where information about leather products and production can be found. The tag is available to any company in the UK involved in the design and manufacture of leathergoods.

Director of Leather UK, Dr Kerry Senior, said the project would serve as “an additional means of tackling the misinformation that surrounds the material and the industry”.



half of this year include the construction of a children’s library in a small town in eastern Turkey. “We believe more than 10,000 girls and boys will benefit from the library in the next ten years,” United Chemicals has said.

Another idea involves funding for the drilling of a well in a village in rural Malawi.

In the second half of 2023, it hopes to fund, with the help of its customers, scholarships for more than 500 girls of school age and provide them with the materials they need too. Its aim is to increase this number year on year.

Comeback for craftsmanship component

For the first time in three years, the forthcoming edition of Première Vision, which takes place in Paris from February 7-9, will once again include Maison d’Exceptions, a special component that showcases craftsmanship.

A total of 23 ateliers from France, Japan, India, Italy and the UAE will take part, demonstrating artisan skills and know-how.

Freiberg Leather Days 2023 – call for papers

The eleventh Freiberg Leather Days conference will take place on June 28 and 29 in Freiberg, Germany. Co-organisers the German Leather and Chemists Society (VGCT) and FILK Freiberg Institute have issued a call for papers, with abstracts to reach them by March 28.

Topics that are to be addressed at the conference include new technologies for leather production, the use of sustainable

raw materials in the tannery, innovative processing technologies, automation and machinery, new trends among finished product manufacturers, and artisan tanneries in the age of Industry 4.0.

Circular economy move from Gruppo Mastrotto

Italian leather manufacturer Gruppo Mastrotto has launched its new patent-pending material, Reviva.

This material is the result of a project that uses finished leather scraps and offcuts that are normally considered waste.

Chief executive, Chiara Mastrotto, said Reviva was part of the group’s “sustainability journey” and presented the company with a good solution to the challenge of putting leftover material to good use.

In-house leather business for sale

Footwear group Wolverine World Wide has announced its intention to let its in-house supplier of leather go as part of a series of cost-saving measures.

In a statement on December 8, the Michigan-based company said it wanted to sell Wolverine Leathers or licence its operations to a third party.

The footwear group ran its own tannery in Rockford, Michigan, for 100 years, specialising from the 1950s onwards in making nubuck leathers from pigskin for brands in its portfolio, including Hush Puppies.

This tannery ceased production in 2009, but Wolverine Leathers has, until now, remained an active part of the group, contracting leather production and

colouring to suppliers in five locations in the US, Vietnam, Thailand and China.

In the December statement, Wolverine said its leather division was a “low-profit contributor” and that it wanted to create more value for shareholders.

Bolus bonus in fight to reduce methane

New Zealand’s government is investing millions of dollars in technology to reduce methane emissions from livestock.

It has pledged NZ\$8 million, equivalent to \$5 million, in funding for a project called Cut Agricultural Livestock Methane (CALM), which a start-up called Ruminant BioTech is running. Investors in the company will match the government funding.

CALM is based on placing a bolus, or large capsule, in the stomach of a cow, providing slow-release doses of a chemical called tribromomethane. Ruminant BioTech chief executive, George Reeves, has said trials of the system have resulted in a 90% reduction in methane emissions over a period of 80 days.

The company now aims to develop the system further to deliver a 70% reduction in

emissions, but over a longer period, six months. Mr Reeves has said the methane inhibitor bolus is unique technology that has the potential to deliver significant climate change impacts.

He explained that almost 50% of New Zealand’s greenhouse gas emissions come from agriculture and that three-quarters of this comes from methane produced by cattle and sheep. “While most countries around the world can meet their methane reduction targets by increasing clean energy sources, New Zealand’s situation is more complex,” he explained.

He also pointed out that many of the methane mitigation products in development already are primarily feed additives. Because New Zealand’s livestock are mostly grass-fed, feed additives are not practical there.

“The aim is for our bolus solution to be suited to every ruminant animal, on every New Zealand farm. There is no other solution currently available anywhere in the world like it. It’s a real game-changer,” he insisted.

Reacting to the news, Professor Frank Mitloehner from the University of California, Davis, agreed that it was possible for a

bolus solution to be a game-changer and said he was keeping his fingers crossed for his colleagues in New Zealand.

Swiss group aims to boost its presence in leathergoods

Textile machinery manufacturer Oerlikon has reached a definitive agreement to acquire Riri, a provider of coated metal accessories including zips, buttons and rivets for leathergoods and other products.

Both companies expect the transaction to close in the first quarter 2023, subject to regulatory approvals and standard closing conditions.

Executive chairman of Oerlikon, Michael Suess, said Riri was “highly complementary to our existing business”. He said the acquisition would reinforce the group’s presence in leathergoods.

For his part, Riri chief executive, Renato Usoni, said the deal would allow the company to accelerate its growth. He also said access to technology such as Oerlikon’s PVD (physical vapour deposition), a thin-film coating solution, would help it make its components in a more environmentally responsible way. ☺

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Smit & Zoon CEO steps down

The chief executive of leather chemicals group Royal Smit & Zoon, **Hans van Haarst**, resigned from his position with immediate effect in January. He will leave the organisation after “an orderly transition” on July 31. **Marc Smit** will assume the chief executive role with immediate effect.

Hans van Haarst has led the company for ten years. Smit & Zoon said he had worked “with expertise, energy and dedication”. Accomplishments it highlighted included “an industry-leading approach to environmental, social, and corporate governance, the acquisition of Codyeco, the expansion of its global presence and creation of the Nera subsidiary.

CEO handover confirmed at Zschimmer & Schwarz

Leather chemicals manufacturer Zschimmer & Schwarz has confirmed that **Dr Christoph Riemer** assumed the role of chief executive on January 1. It announced this planned succession last June and Dr Riemer has been working at the group since August, in preparation for taking up the chief executive role.

Zschimmer & Schwarz said Dr Riemer would work with chief financial officer, **Dr Dietmar Clausen**, and chief operating officer, **Dr Felix Grimm**, to determine the future course of the company.

Previous general manager for operations, **Wolfgang Nowak**, left the company at his own request at the end of 2022 to pursue new professional challenges. **Dr Martin Haberl**, previously general manager for sales and marketing, left at the same time. Dr Haberl will continue to be available to Zschimmer & Schwarz in an advisory capacity before retiring, probably in mid-2023.

At the start of the year, Dr Riemer said: “I have used these first few months to gain a good insight into our business divisions, our customer base and our markets, and to get to know our locations and employees. As a team, we have made it our mission to continue the success of Zschimmer & Schwarz while identifying new potential and opening up further growth markets.”

Change of chief executive at Louis Vuitton

Luxury brand Louis Vuitton has a new chief executive. After ten years in the role, **Michael Burke** is to leave and take “new responsibilities” within parent group LVMH.

Louis Vuitton’s new chief executive will be **Pietro Beccari**, who has been chief executive of another of the group’s brands, Christian Dior Couture, since 2018. He will take up his new role on February 1.

Ecco says mycelium material is no alternative to leather

The chief executive of footwear group Ecco, **Panos Mytaros**, has told *World Leather* that the company remains committed to producing and using leather.

He made the comments in the wake of an announcement that the group’s tanning division, Ecco Leather, which Mr Mytaros used to run, had entered into an agreement with a New York-based mycelium technology provider, Ecovative. The two companies announced in November that they would work together to develop mycelium materials for use in a range of finished products.

Panos Mytaros explained that Ecco Leather had already spent seven years looking into the possibility of making a new material that was “grown from nature”, but non-animal-based as well as free from polyurethane and other plastics.

“The world needs polyurethane-free material,” the Ecco chief executive said. But he said that no one should interpret this development as a move away from leather on Ecco’s part. He said it was simply a question of giving consumers the variety they want.

“People can interpret things however they want, but this is not an alternative to leather,” he said of the mycelium material. “We are clear that Ecco Leather is a leather maker and our commitment to leather remains. But we are a leather maker that pushes innovation and is trying to make an old-fashioned industry modern.”

He said Ecco Leather would continue its efforts to help leather claim its place in the circular economy, but he added that he feared circular innovations the company has already come up with, mentioning the DriTan tanning technology it introduced in 2018 as an example, were receiving less attention than they deserve.

At the time of its launch, Ecco Leather said DriTan would allow it to save 250 million litres of water per year at its tannery in the Netherlands.



His replacement at Dior will be **Delphine Arnault**, who has been executive vice-president of Louis Vuitton since 2013. She worked at Dior before that. Ms Arnault is the daughter of LVMH chief executive, **Bernard Arnault**.

On making the announcements, Bernard Arnault said: “I extend my warmest thanks to Michael Burke, who has led the extraordinary success of Louis Vuitton during the past ten years. He has done a tremendous job developing this exceptional maison.”

He described Pietro Beccari as having done an exceptional job at Christian Dior over the past five years, giving the brand “fresh intensity”. He added: “I am sure Pietro will lead Louis Vuitton to the next level of success and desirability.”

Turnaround at the top for Prada

A new leadership team at luxury brand Prada is taking shape, with the group announcing that **Andrea Guerra’s** appointment as new group chief executive was to be confirmed at a board meeting this January.

Mr Guerra, a former chief executive of eyewear brand Luxottica, has been at luxury

group LVMH since 2020, first as chief executive of its hotel and hospitality activities and, since midway through 2022, as a strategic advisor to the group.

He will replace long-standing Prada chief executive, **Patrizio Bertelli**, who will become president of the group, whose brands include Miu Miu, Church’s, Marchesi 1824 and Luna Rossa, as well as Prada itself.

At the same time, the group has announced that **Gianfranco D’Attis** has joined to become chief executive of the Prada brand from the start of January. He was previously president for the Americas of Christian Dior.

Chief sustainability officer appointment at PrimeAsia

Leather manufacturing group PrimeAsia has completed its search for a new chief sustainability officer and has appointed **Camille Mori** to take over the role. She will join the company in February.

She joins PrimeAsia from the Phillips-Van Heusen Corporation (PVH) where she had roles in sustainability and corporate social responsibility. Among her educational

qualifications is a Master's degree in social impact and sustainability.

At PrimeAsia, she will lead a team dedicated to highlighting the sustainability of the company's products and manufacturing operations and will report directly to chief executive, Jon Clark.

Turnover boost tells only part of the story

President of Italian footwear manufacturers' association Assocalzaturifici, **Giovanna Ceolini**, has said positive figures for the period covering January to September 2022 tell only part of the industry's story.

Surveys that Assocal has carried out among its members suggest an increase in exports over the nine-month period of nearly 24% in value year on year and of 11.7% in volume.

Overall, members reported an increase in turnover for the period of 13.9% year on year and Assocal said its projection for the full year was of a return to pre-pandemic levels.

However, Giovanna Ceolini warned that sharp increases in costs, especially of raw

materials and energy, were eroding margins. She also said that, even if the sector as a whole returns to pre-pandemic levels when full-year figures come out, two out of five footwear manufacturers in Italy will have turnover levels that remain lower than the levels they registered before the covid-19 crisis.

She said 180 shoe manufacturing companies in Italy had closed down in the course of last year, 4.5% of the total. And although employment levels increased in 2022, with the overall workforce rising by 2.3%, this was not enough to compensate for the job losses of the previous two years.

Burberry strengthens executive team

Leathergoods and fashion brand Burberry has announced two appointments in newly created positions to strengthen its digital and innovation department, and its merchandising arm.

Giorgio Belloli has been named chief digital, customer and innovation officer. Burberry has also appointed **Delphine Sonder** as chief merchandising officer, both with immediate effect.

Based in London and reporting directly to chief executive, **Jonathan Akeroyd**, Mr Belloli will be responsible for leading the global e-commerce, digital product, and analytics teams, as well as a newly formed innovation function. Ms Sonder will lead merchandising and global planning across accessories and ready-to-wear, as well as product strategy.

Senior appointment at Tyson Foods

Meat and leather producer Tyson Foods has announced **Brady Stewart** as president of the group's fresh meats division. Mr Stewart took up the role at the start of this year, joining Tyson from Virginia-based meat group Smithfield Foods, where he was chief operating officer.

He will be responsible for strengthening the competitiveness of the company's beef and pork businesses. Tyson has said this will come through innovation, technology, data and analytics.

Mr Stewart will replace **Shane Miller** in his new role but they will work side by side for part of this year to ensure a smooth transition before Mr Miller leaves Tyson after 30 years' service. 🌐

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We list below just a few of the headlines that have appeared on the site in recent weeks and can still be accessed.

19 January 2023

European Livestock Voice announces conference
Leathergoods lift Burberry, in spite of China disappointment
Madrid prepares for Momad
China delegations head to APLF in Dubai

18 January 2023

Double-digit growth for Richemont accessory brands
Upward revision of Chinese beef imports

17 January 2023

Lineapelle returns to the Big Apple

16 January 2023

New leathers on display at Inspiramais

12 January 2023

Another luxury car record

10 January 2023

Colombia's footwear sector faces labour shortage
Final-quarter dip in revenue clouds Stella International's 2023 outlook
Potential strategic buyer for Wolverine Leather

09 January 2023

Highest ever sales of Rolls-Royce cars
Sharp increase in low-priced footwear imports into Mexico

06 January 2023

Paraguay progress on beef exports to US

05 January 2023

Pest control developments for livestock

04 January 2023

UN approves International Day of Zero Waste idea

03 January 2023

Classic Porsche 964 goes electric
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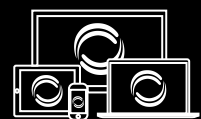


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Regional influence

Thailand's leather industry has much to offer finished product manufacturers across the Association of Southeast Asian Nations (ASEAN) economic union and beyond, according to industry leader, Suwatchai Wongcharoensin.

How many tanneries are there in Thailand today and how many people do they employ?

Thailand has around 200 tanning factories and these employ about 12,000 people.

What are the main types of raw material your member companies use and the main target application areas (footwear, automotive et cetera) for the finished leather they produce? If possible, please give a breakdown in percentages.

The main types of raw material used are domestic cow and buffalo hides, imported cowhide, imported pigskin and other skins. The main applications are leathergoods with around 40% of the total, shoes with 35%, furniture with 20%, and car seats with 5%.

What percentage of the finished leather your member companies produce stays in the domestic market?

Of the finished leather we make, 40% is used in Thailand and we export the other 60% to customers abroad.

Which are the main export markets for you?

The main export markets are China, Hong Kong, Indonesia, the CLMV Group (Cambodia, Laos, Myanmar, and Vietnam), India, Bangladesh, Japan, the US, and the European Union.

*President of the Thai Tanning Industry Association,
Suwatchai Wongcharoensin.*

CREDIT: WTP



The Thai Tanning Industry Association wants the leather industry in Thailand to become more and more of a player in the global market.

CREDIT: WTP



The Regional Comprehensive Economic Partnership (RCEP) was ratified by Thailand and many partner countries at the start of 2022. What difference has this free trade agreement made in the short term to Thailand's economy in general and to the leather industry in particular?

As with any new free trade agreement, many investors or manufacturers will need more time to study and to understand RCEP before they know what the benefits will be. In the short term, we in the leather industry will probably not see any benefit from RCEP, but it can be further developed for our businesses, although that may take another two or three years.

RCEP's signatories are the ten ASEAN countries (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore and Thailand), plus China, Japan, South Korea, Australia and New Zealand. What are your longer-term hopes and expectations for the partnership?

In the long term, it should be a good advantage for all manufacturers in all countries in the group because they will be able to do business more easily.

Many industry commentators have talked of an acceleration in the transfer of manufacturing platforms from China to other RCEP countries. In your opinion, what could this change mean for leather manufacturers in Thailand?

If manufacturing platforms are to move from China to other RCEP countries, I hope Thailand will be one of the countries on the list. During the covid-19 pandemic, leather manufacturers in Thailand had to develop and adapt, prepare themselves for the new market and get ready for new investment.

As a near neighbour, how do you view the current economic situation in China and what do you think will happen there in 2023?

The current economic situation in China now is that it is not quite open yet. China is a big country and it will not let any

"If manufacturing platforms are to move from China to other countries. I hope Thailand will be one of the countries on the list,"

other country decide its economics. For the leather business, normally, the authorities there only provide support for operators in their country. But if China imposes limits and controls on its tanning industry, it could bring benefits to manufacturers in neighbouring countries. This could be good for our activity in the export market. Even now, China still needs to import some of the material it uses in making shoes and leather goods and it sources some of this material in Thailand, Vietnam and other countries in the region. This change could be good for the Thai tanning industry; leather manufacturers in Thailand could win lots of new orders.

What are the general levels of optimism among your member companies about their prospects for 2023?

In the past two years, after covid-19, the economy has improved and demand for leather products has grown; this is because people have been spending more than before. We hope our members will get ready for new investment. Thailand is a hub in the tanning business in south-east Asia and there is demand for Thai leather and leather products in the global market. We want the Thai leather industry to be able to compete more and more in the global market. There are good standards for environmental management and large scale standardised wastewater treatment systems here. These are making it possible for us to have a higher level of performance in wastewater treatment than our competitors in other countries. 🌱



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METAL-FREE LEATHER

Nothing to Hide: Alternative materials to leather: environmental impacts and cost



Executive summary

Money should only ever be one factor in measuring cost. Plastic alternatives to leather are made from non-renewable oil-based materials and there is a cost from this to the environment in terms of depleting natural resources, polluting the planet and adding to greenhouse gas emissions.

In the leather industry, meanwhile, there has been remarkable progress in the use of renewable energy and other renewable resources in the tanning industry in recent years. Significant progress has been made in the recovery of chromium (III) for reuse in manufacture, and an increasing number of tanners are moving towards renewable vegetable dyes and renewable tanning chemicals.

Starting in 2009, World Leather's Tannery of the Year programme profiled tanneries based on their commitment to corporate social responsibility and sound environmental practices. As a judge for the Tannery of the Year competition, the author of this essay can attest that all entrants demonstrated a massive commitment to the reduction of chemicals, water and energy. In his 40 years in business, and in his travels to 65 countries visiting hundreds of factories across industry categories, he says he has never seen any group of companies, nor any industry as a whole, devote so much time, money and energy to reducing its carbon footprint and becoming a responsible environmental citizen as the leather industry. For the sake of the planet, and for all living on it, leather purchased from responsible manufacturers is the clear choice, he argues. 🌱

About this essay

We published the thirteenth Nothing To Hide essay in its original form in *World Leather* April-May 2016. It was written by Steven Jessep, who had been chief executive of Worldwide Responsible Accredited Production (WRAP) and chair of the judging panel for our Tannery of the Year programme. At that time, a look at materials that presented themselves as being direct competitors of leather inevitably concentrated on polyurethane, polyvinyl chloride and other plastics that manufacturers present as alternatives. In this updated version, we reflect also on more recent developments.

Plastic waste in December 2022.

PHOTO CREDIT: SHUTTERSTOCK

The interior of the 2023 Cadillac Escalade, with semi-aniline leather upholstery.

PHOTO CREDIT: CADILLAC

Nothing to Hide: The impact of alternatives to leather

There are many options available to designers and brands who, for whatever reason, prefer not to work with leather; plastics, including polyvinyl chloride (PVC), and canvas are among the most widely used. As Steven Jesseph, former chief executive of Worldwide Responsible Accredited Production (WRAP) and chair of the judging panel for the Tannery of the Year programme discusses here, however, any arguments based on perceived environmental or health advantages require serious examination and are unlikely to stand up.

In this essay the singular focus is to examine the benefits and negatives of alternatives to leather, with the focus mostly on products made from oil-based materials or cotton. Part of the focus is the difference in cost between leather and these other options. It is no secret that creative designers, chemists and manufacturing professionals have been able to replicate the look of leather so well that it can be difficult to tell real leather from a fake through visual examination or touching the product. Sometimes, only by carefully examining the backing can one tell: a synthetic product will often be built up of several layers of textile backing, polyurethane, lacquers, varnishes and more.

In many cases, synthetic materials imitating leather can offer one advantage over leather because they are usually less expensive. Faux, or fake, can be more waterproof, resistant to scratching and wear by rubbing, fading from the sun and more. It can be cut and sewn into

virtually any shape and used for all manner of clothing, furniture, automotive, aviation and marine interiors, equestrian, military, footwear, wall and floor coverings, bags and luggage, purses, belts, watch bands and more. The uses seem to be only limited by the creativity of the designer and manufacturer. PU may cost less, but is it really less expensive in the long run?

Full cost

Financial cost is only one measure of total cost. It likely does not account for the environmental cost of obtaining the raw materials or component parts of a product. How much damage is done to the environment in extracting natural resources, either renewable or non-renewable? How much pollution is added to the atmosphere (air, water, soil) in the process of extracting, transporting and converting the resources into usable components? If that pollution is harmful to

humans, as we are seeing in many developing economies (as they continue to add heavy pollution from burning coal to create energy), what is the medical cost and human cost of the pollution? How many people have become ill or died as a result of being poisoned by airborne pollutants, or have respiratory problems that require medical intervention?

If the pollution damages marine environments and kills marine organisms, how do we calculate the cost of lost fish and other organisms which are part of the marine food chain? What happens if that pollution kills whole marine ecosystems, as we have seen in Jamaica, areas in the Gulf of Mexico, the Chesapeake Bay, Lake Magadi in Kenya and many, many more around the world?

There have been frequent articles in prominent publications, including *The New York Times* and *The Financial Times*, about the growing problems of water scarcity, pollution caused by ever-increasing use of fossil fuels, global warming, rising sea levels, and more. We have had these warnings for decades but there is a much greater urgency in more recent reports.

We are polluting the atmosphere at a rate faster than anticipated, glaciers and the polar ice caps are melting at an increasing rate, which is leading to sea levels rising faster than anticipated. The growing use of fossil fuels has pushed CO₂ levels ever upwards. The influence this has on our weather seems undeniable. We see longer droughts and excessive rainfall in many parts of the world as patterns shift. The current projection, unless we take dramatic and immediate action, is that this will only become worse.

The addition of 5,000,000,000 people to the planet since 1950 is the prime driver to all of these issues: we simply have more people on the planet every day who want quality of life, and as a result, we're adding millions of tonnes of CO₂ and other greenhouse gases (GHG) to our atmosphere. The increase in gases drives increased global temperatures, which wreak havoc in weather patterns, cause the melting of glaciers and polar ice caps, in turn increasing global sea levels. The oceans are absorbing about half of the GHGs, which are increasing the

acidification of the top layers and are beginning to affect the viability of the oceans to support marine life upon which we depend for food.

For me, the issue isn't whether synthetic products are better than leather products. The issue is: which product (real or faux) uses the fewest non-renewable resources in terms of oil and petroleum-based inputs, and which product is the least costly to the environment? Does it really make sense to use oil, when industry experts tell us reserves are depleting at an ever-faster pace, to make a fake product that can be made from "the real thing"? For this author, this is a no-brainer and the answer is 'no'.

Does leather also use non-renewable materials such as fossil fuels and certain minerals? Yes, but we've seen remarkable progress in the use of renewable energy at the tannery level with some tanners moving toward full renewable energy. Significant progress has been made in the recovery of chromium (III) for reuse in the process, and an increasing number of tanners are moving toward renewable vegetable dyes and renewable tanning chemicals.

Cotton wool

Is cotton a good alternative to leather or PU? Through various weaving and treatment methods, it can be made to look similar to leather and have good functionality. However, it is not a good alternative in this author's view. The amount of "organic" cotton available on the world market is negligible leaving us with traditionally grown cotton which requires massive amounts of water for irrigation, pesticides and heavy doses of fertiliser. Decade after decade of fertiliser use has polluted ground water supplies all over the world, and the use of pesticides has had a drastic impact on butterflies and honey bees that fertilise our food crops. It is estimated that in the US alone, 65% of feral bee colonies have been wiped out due to overuse of pesticides, herbicides and fungicides sprayed on virtually every agricultural crop. Unless farmers make a drastic switch away from the use of these chemicals, we may very well face the extinction of wild honey bees in the next decade or two.

Leather purchased from responsible manufacturers is a clear winner.

PHOTO CREDIT: MIPEL



The Center for Environmental Health carried out a comparison between leather and PVC focusing on women's handbags purchased from 100 retail stores. The study found that many of the PVC bags harboured high levels of lead, a known toxin linked to cancer, infertility, Alzheimer's, and a host of other health problems. The levels of lead in some PVC bags were 100 times higher than the safe level of lead set for children's toys (though many scientists suspect there is no safe level of lead). In addition to lead, some of PVC's disturbing ingredients include: chlorine, petroleum, phthalates, and the carcinogen DEHP.

The production process uses harmful chemicals like these, along with dioxin (linked with immune, reproductive, nervous, and endocrine system damage), and Volatile Organic Compounds (VOCs). VOCs are associated with headaches, fatigue, nose-and-throat discomfort among other ailments; some are suspected to cause cancer.

Responding to this Center for Environmental Health study, social network Care2 commented: "Since PVC is a number-three plastic, it's usually not recyclable. Either it sits in landfills, or people try to recycle it, which ends up ruining the recycling of other plastics. Either way, PVC is a waste nightmare."

Laboratory tests

In 2021, in the face of the ongoing presentation in many parts of the fashion industry of non-leather alternatives as being more desirable than the real thing, the leather industry's representative body in the European Union, COTANCE, decided to put some of the claims to the test. COTANCE procured samples of eight widely talked about alternative materials and asked renowned testing and research centre FILK to test their material properties in comparison to leather's. FILK published the results in a paper called 'Comparison of the Technical Performance of Leather and Trendy Alternatives'.

None of the substitute materials exhibited all of the performance characteristics of leather, FILK has reported, and some of them, in 2021, still contained chemicals of concern. At the time of the announcement, COTANCE said: "The fascination with one of the oldest natural materials in the world remains unchanged, and no wonder, because the material is a true all-rounder. It lends a noble touch to fashion, footwear, accessories and furniture, and it brings many functional properties such as durability, tear-resistance and breathability."

FILK concluded that technical progress among the manufacturers of synthetic materials was clear and has led to some of these having "individual properties that are similar here and there to leather's". However, it found that none of the tested substitutes could "truly be called an alternative to leather". In the tests, leather proved superior in terms of water vapour absorption and water vapour permeability, with the other materials scoring "significantly lower than leather" in these tests. Leather also showed a superior performance in flex and tear-resistance tests, indicating greater durability.

Another point that COTANCE made was that, although the producers of synthetic alternatives often present their products as being good alternatives to leather, there is frequently a lack of transparency about exactly what these alternatives are made from. The FILK tests have uncovered more detail. One of the materials it subjected to the tests

was Desserto. The tests showed that the material does contain cactus fibres, as its manufacturers say, but in the sample that FILK tested, the plant fibres were contained in a polyester carrier fabric that had two layers of polyurethane on top. The sample was 65% polyurethane.

Root system

More recently, a number of leather manufacturers have begun to work closely with companies making alternative materials from mycelium, the material that the root structure of mushrooms forms. The material is being produced originally in laboratories and tanners are then processing it into a cuttable fabric that can go into bags and shoes. These partnerships have attracted attention from outside the leather industry and some criticism from inside. Tanners involved have consistently made one thing clear: they regard these new materials as alternatives, not to leather, but to the fossil-based products that synthetics manufacturers present as being good substitutes for leather.

Incorrect and obsolete information about the leather industry continues to be published or broadcast on television and radio, in newspapers and magazines, even in reports from respected organisations including the World Bank and the United Nations Food and Agriculture Organisation (FAO). Campaign groups, often with anti-leather agendas, have used this material to further damage perceptions of the leather industry. This Nothing to Hide collection of essays is designed to combat this head-on by sharing accurate, up-to-date information and explanations of how and why tanners and their upstream suppliers work the way they do. The best in the industry have nothing to hide; they have much to be proud of, as this exciting series proves.

Social capital

In a similar way, the Global Tannery of the Year programme and *World Leather* magazine have also highlighted the excellent work tanners around the world are carrying out in terms of corporate social responsibility and sound environmental practices. Tanneries from Europe, the Americas, Asia and Africa are identified. As a member of this programme's panel of judges, this author can attest that all entrants to the contest have demonstrated a massive commitment to the reduction in the use of chemicals, reduction in the use of water, and reduction in the use of energy.

In my 40 years in business, and in my travels to 65 countries visiting hundreds of factories across industry categories from military hardware to paper products, food and footwear, coffee and clothing, I have never seen any group of companies, nor any industry as a whole, devote so much time, money and energy to reducing its carbon footprint and becoming responsible environmental citizens. Does the industry deserve a "gold star" for its present behaviour? Certain companies certainly do as they are stellar examples of "how to do it right". However, there is still much progress to be made. The industry does deserve massive credit for the work it has already done, and for being a leading example for all industries. For this author, there really is no debate. For the sake of the planet, and for all living on it, leather purchased from responsible manufacturers is the clear choice. 🌱



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TFL – Great chemicals. Excellent advice.

With the advent of new wet-white chemistry, leather can now be engineered to suit final product lifecycles before safely biodegrading.

CREDIT: SCHILL AND SEILACHER

It's leather but not as you might know it

As an industry, we are quick to promote leather's longevity but new chemistry and tannages could make its lifespan more flexible to meet fresh demands that consumers might want.

We all know what leather is, where it comes from, and the intrinsic qualities and properties it naturally has. "The hide or skin from an animal, with its fibrous structure more or less intact and tanned to be imputrescible" was one of the first things most young leather students would learn, verbatim. This statement, taken from the British Standard BS 2780, also goes on to cover other elements. Most recently, however, the focus on the imputrescible nature of leather has been the subject of many conversations.

Leather has a long and varied history. Smoke, fat and brain, vegetable tanning, all vying for possible and probable founders of the technology but no one can be absolute in knowing this. What we do know is that, ultimately, the preservation of hides and skins has been part of hominin history for tens of thousands of years. Archaeological discoveries in 2021 of prehistoric bone scraping tools found in caves in Morocco dating back over 90,000 years provide hard evidence.

By the early 1900s, when chrome tanning had been established, the seemingly perfect fail-safe test of tannage was found – the boil test. This was a simple yet effective measure of complete tannage. Until that time, the vegetable, alum (tawed) and oil tanned leathers all gave varying levels of hydrothermal stability but were deemed sufficient for what they were to be used for. It now seems that whilst we argue that "alternatives" to leather should not be called as such — they are far from the definition of leather — we now find ourselves in an interesting position where the definition we hold so dear might need to be tweaked. For certain applications, the longevity afforded by tannage is essential. In this instance, the durability of the product means that it

could be used, repaired, reused, and re-loved by someone else and certainly not likened to the longevity of a plastic bag where plastic will slowly fragment into smaller and smaller microplastics, pervading the natural environment. However, this "tannage timeline" is not necessary or even relevant for many applications today. Where the beauty of a leather bag, handed down from generation to generation strikes at the heart of the value of both the product and the leather itself, the same is not necessarily true for the leather upholstery in a car, which will most probably outperform the life of the engine, electrics and bodywork but there is very little sense in buying a car purely for the degradability of a leather interior and even less in looking at it as an heirloom. There are, of course, other desirable properties but in this specific way, the requirements and function of the leather are totally different.

Working together

You do not have to look too far back into the history of leather making to see that there were clearly some divides in the industry. Not just based on the tanning chemistry employed but on raw materials used and the resultant products – bovine, ovine, light leathers, heavy leathers, garment, upholstery, gloving, shoe upper, shoe sole – tanners kept in their lanes and blinkered out the others...but, and with reference to the conversations mentioned earlier, there is a wind of change breezing through the industry. Setting the standard that chrome tanned leather was the pinnacle and to find an alternative material that did the same job but without "issues" has now been side-stepped by many chemical suppliers and a new age of thinking is being broadcast. The realisation has dawned that a one stop shop is no longer

necessary, and it really is not essential to engineer leather to be completely imputrescible, and thus be handcuffed into a definition that no longer serves us in our best interests. By providing a technology that allows the product, whatever that may be, to be made but perhaps with a few extra steps is now becoming the more common approach.

By looking at the real necessity of leather (definitions aside), with its need to be stable, transportable and to some degree workable, and with biodegradability now being as much of a requirement as well, the approach to its manufacture has, for the last decade, possibly seen more innovation than in the previous century.

A move towards metal-free

In 2011 Clariant – latterly selling their Leather Business unit to Stahl – introduced what was one of the first metal-free, aldehyde-free wet white and biodegradable leather tanning products. At the time, emphasis was put on the process time and chemical savings that Granofin Easy F-90 (Easy white) gave. More recently the degradable nature of the product, and resultant leathers have chimed with customers and consumers as well as the climate for more environmentally friendly products. Similar leathers also presented by Lanxess at the time (its leather business unit now merged with TFL) with their X-Tan process, based on polycarbamoyl sulfonate, the process does away with a standard pickling process and so resultant wastewaters have a reduced salt load in the effluent.

With recent legislative consultations over glutaraldehyde casting a shadow over its use in the manufacture of other wet white leathers, many other companies have been quick to show their innovative chrome-free, heavy metal-free and aldehyde-free technologies. Aluminosilicate materials and zeolites, such as those brought to market by Nera tanning, a subsidiary of Royal Smit and Zoon, with its Zeology product and Sertan WT by Quimser, were released in 2020. The leathers produced were said to be more environmentally friendly, offering advantages to almost all sectors in the industry. Not new to the leather industry, zeolites have been used for many years in basification preparations for chrome tanning as an aid to increase chrome uptake but failed in their attempts, at the time, to be used as full tanning materials.

One matter that surrounds many of the “new era” of tanning technologies, is their biogenic potential. Most recently, Schill & Seilacher has launched a product that seemingly answers this question. Succuir, the name the company has given to its new sugar tanning material, presumably a play on words between sucrose (sugar) and cuir (leather), claims to be the first, and only, 100% biogenic wet white tanning material on the market and is made from a waste from the vegetable oil industry.

Whilst quite different in their chemistries, these new approaches all offer a common goal. The ability to produce an intermediate leather where the solid wastes in the form of trimmings, shavings and splits are biodegradable, the resultant wastewaters are easier to treat and through careful post tanning operations the leathers can retain the biodegradability that these tanning materials afford.

The definition that leather must come from the tanned hide or skin of an animal is incontrovertible but, for the future, and with work that can be seen today, engineering in the process can give quantitative life cycles that work for both the consumer and the environment. 🌱



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APLF – past, present and future

With the APLF having hosted only one other show outside of their home base of Hong Kong – Dubai 2022 – the industry watched with an eager eye to see how things would unfold in the new, possibly one off, venue of Bangkok.

At the end of the APLF Dubai show in early April 2022, the exhibitor questionnaire that was distributed asked whether there was a strong enough feeling to hold another event in this same location but also pondered the question of another show, perhaps to be held in Singapore or Thailand. Bearing in mind the historic calendar of leather-related trade shows, shoehorning another event into the diary would seem a tall order. Postponement of shows due to covid certainly gave rise to the inclination that another chance for face-to-face meetings and to reignite business would be a good opportunity; the preference to hold such an event in a more geographically “Asian” region satisfied both exhibitors and visitors alike. The choice of Bangkok was swiftly announced at the beginning of June, giving just over four months to prepare. APLF event director, Grace Lee, said at the time that the special edition would have the aim of attracting leather buyers from the ten member states of the Association of Southeast Asian Nations (ASEAN), these being Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam..

The venue for the event was the newly refurbished Queen Sirikit National Convention Centre. A gleaming monolith of a building, the choice of venue was ideally located close to hotels and transport hubs, relatively close to the airport, but perhaps more importantly, close to the tanning districts of

Samutprakan. With industrial zones at KM 30 and KM 34 – literal locations on the Sukhumvit road, a 488km road running down the Thailand coast from Bangkok to the border with Cambodia, these tanning zones were set up over 60 years ago when government policy moved them away from the more community-based areas of Nonthaburi and Klongtoey. The Thai Tanning Industry Association was established in 1967 and currently has 107 members between the two districts – 61 at KM 30 and 46 at KM 34.

Location, location, location

One of the main attractions for a show in Bangkok was its location. The aforementioned tanning districts not only enabled the local tanners to participate but the proximity of other industry associated businesses in the rest of Thailand or slightly further afield such as Vietnam, Malaysia and Cambodia (a drive away if you were so inclined to travel the 488km!) meant that bolt-on visits from the show could be easily accommodated – with flight times of only a few hours.

It is fair to say that most shows in the somewhat “post-pandemic” era garner positive response. Exhibitors are happy to be there and can justify the expense, and in Bangkok, the out-of-show expenses, such as hotels and eating, were much more agreeable – with more than one exhibitor explaining that should it happen again, they could

easily bring more of their team to give better customer interaction. Yes, visitor numbers may be lower than in previous years but in the same vein, those who do attend are serious in what they are trying to achieve.

Make no mistake, the previous event in Dubai, to be run again in 2023, is no replacement for any of the APLF shows. Event organisers have been clear to explain that 2024 spells a return to Hong Kong – whilst ever that decision is in their power. The move to Dubai was, and is, a place holder in the calendar, giving the industry the opportunity to meet and do business in as normal a way as has been possible to do so in the past two years. Dubai was the first country that really opened the doors to foreign visitors and start back up with exhibitions. That said, the region does have links to the industry. Close neighbours Iran and Saudi Arabia are both leather producers of importance to the area as too is Egypt, with over 200 tanneries at the Roubiki leather city alone, and APLF hopes to open the door to the Middle East leather market, which is expected to register significant growth in the next few years, with rapid developments in the infrastructure and construction sector.

At the show

The metrics that have been used to judge the success of recent shows have all had positive outcomes but, however, with the absence of the Chinese from any of them what could be said of them had this not been the case? China's position on travel makes it very difficult to know what will happen going forward and more recent local lock downs due to covid-19 do nothing to raise the hope that shows in the near future will see any difference. With respect to Hong Kong, shortly after the Bangkok show, event organisers told *World Leather* that the Chinese government had announced the reduction of the hotel quarantine period for inbound travellers to China, from seven days to five days, with Grace Lee calling it "a small step but good direction".

With the expectation of seeing around 4,000 participants, the after-show statistics from Bangkok suggest that these numbers were achieved. Aside from the exhibition stands, the event also saw some new elements, used to ensure that both exhibitors and buyers could benefit from an improved



Signature works were on display featuring designers from Thailand and other ASEAN regions. In addition to these displays, the designers participated in a networking seminar where they could discuss their designs and their relationship with leather. Thai handbag brand Marroque, represented by Nannaphat Sirasitsiri, took inspiration from increased awareness of sustainability issues and uses leftover leather to make its bags.

exhibition experience, making the most of workshops, conferences, trend forums, and business-matching meetings. The overall sentiment from the show was one of positivity and that it was a better location than Dubai – for the previously mentioned reasons. What plays out in the near future is unknown. The feeling that the industry can only sustain a certain number of shows in a year is certainly an issue

and with calendars prepared well in advance and business pivoting on historic and well understood time frames, it is difficult to forecast whether an international autumn show would enhance or dilute what is already in place. What is certain, after all the disruption of the last few years, a return to a real normal would do for a start. On that score Hong Kong 2024 can not come soon enough! 🌍



Future leathergoods designers were given the opportunity to showcase their designs in a centralised collection. Design students representing five different universities from Bangkok displayed colourful leathergoods, footwear and accessories designed and made by students.

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Tannery expansion leads to further innovation

Ahead of the APLF show in Bangkok, World Leather revisited Interhide Limited, Global Winner of Tannery of the Year 2018. Following their win and a series of expansion plans, what does the future look like for IHL?

This is not the first time this magazine has returned to the tannery in Bangpoomai, Samut Prakan, a suburb of Bangkok and an area that is home to one of the industrialised zones that comprises over 40 tanneries. Back in 2019, after expansion of their tannery site which saw the installation of eighteen new drums, hide transport and chemical injection systems (see *World Leather* April/May 2019), hide processing was increased to a capacity of over 100,000 per month, more than double that of their 2018 capacity. The majority of their customers are in the automotive and footwear sectors, making use of the bovine hides and pig skins they turn into leather, but the company also makes furniture for the domestic market.

Expansion gives way to innovation

Whilst expanding the tannery provided the opportunity to increase its offering to a growing customer base, the downside, if it can be described as such, was the increase in the resultant waste products. Having previously worked with a chemical supply company to create a protein filler from the solid wastes of the tanning process, utilising chrome shavings, attention soon turned to the waste from this and other tanning process materials.

In producing a protein rich material for the filler, a good quality tallow type material is also produced, and it is with this that IHL has found exciting results. By incorporating the tallow into a post tannage and finishing formulation, leathers are produced that are claimed to be unrivalled in their feel and appearance. Moving away from a more heavily finished look, the leathers have a tactile feel, described as “round” with a slight burnished pull up effect. Utilising the in-house production also brings the company ever closer to its zero waste goals, a situation that it is very close to, having implemented many waste-diverting projects in the last five years.

Whilst the lowest grade material is turned into dog chews and prime grade material finds its way to the automotive and shoe upper customers, in more recent times, the idea came to tie together a better use of hides that may have some unique aesthetic characteristics – those that fall somewhere between grades for certain customers and the utilisation of the aforementioned manufacturing by-products. By doing this, its Wildhide was released as a product range that celebrates the natural markings that leather has, bringing back what Interhide hopes is the connection between the farm and the consumer.

In terms of maintaining its supply of hides, general manager Wasin Thumrongsakunvong explained that they have a very good relationship with the local farmers – due to the volumes required, hide selection consists of taking



Wildhide leather is marketed as a natural product that shows some signs of the life of the animal. Natural markings are celebrated in this leather range.

CREDIT: WTP

everything that is available and then finding a home for it.

Perhaps contrary to many publicised automotive statements, IHL is seeing a resurgence, where customers are returning to an increased use of leather, reversing a growing trend where car seats seem to be moving away from full leather to a central leather panel or just a leather seat front, with other areas making use of synthetics. The reason for the change, it was claimed, was due to alternative materials failing, mostly seen with tearing. With leather used in seat cushion sides, areas of high friction and concentrated wear, fewer aftermarket claims are made. Whilst cost is important to their customers, reputation is crucial. Longevity of leather provides assurances to their customers that reputations can be upheld. Looking to the future, Mr Wasin was relatively optimistic. In his opinion, the future will see some consolidation with regards the cars manufactured by their customers. Supporting multiple manufacturing sites, where consistencies can be difficult to manage, will be reduced, as will be the number of suppliers providing the material. In this way, better control can be achieved. 🌱



CREDIT: DR T. TURMUNKH

New materials from livestock-origin raw materials

Authors:

Dr. S.Tugs, Professor, Graduate School of Business, Mongolian University of Science & Technology;
Dr. T.Turmunkh, Director of Research and Development Institute of Light Industry (RDILI);
MA D. Tserennadmid, Assistant Researcher

Researchers in Mongolia believe that the development of national traditional technologies is the right way to enter the global technology market due to the specifics of the country. Conducting research and experiments on the processing of the raw material from pastoral livestock, certain results have been achieved. Examples include organic surgical sutures¹, a novel material called "Rumen leather"², and eco-bags made of beef bladder^{3,4}. It is estimated that the export potential of these products, along with associated business interest, could considerably increase the country's GDP whilst drastically reducing the amount of livestock waste.

The landlocked sovereign country of Mongolia, bordered to the east, south and west by China, and with Russia to the north, is a country of 1,564,116 km² and a population of just 3.4 million, of which some 1.6 million people live in the capital city Ulaanbaatar. Traditionally a nomadic race, Mongolians have been engaged in pastoralism in their vast lands since ancient times, typically working with sheep, goats, cows, horses, and camels. By the end of 2021, total livestock stood at almost 70 million, ranking them first in the world for the number of livestock per capita. For this reason, the traditions and experience of processing raw materials of animal origin for a range of uses features heavily in their lives. With the foundation of a modern manufacturing industry dating back to the 1930s, currently there are over 100 leather product manufacturers and 35 leather processing factories.

The intestines and by-products of Mongolian animals are considered very nutritious, with vitamins and minerals, but nevertheless, on average, more than 300,000 tons of animal-origin raw materials are discarded each year. Apart from potentially polluting the environment, large sums of money are spent on the disposal of the waste by landfilling.

From the livestock, it is estimated that the population uses about 200 different products for their everyday consumption and basic housekeeping and domestic needs, where all the livestock-origin raw materials are processed through traditional, ecologically friendly technologies. Notwithstanding the large number, research is underway to further advance these traditional product developments, and business modelling, as Mongolia cannot keep up with technologies emerging from developed countries and sees the need to pursue a "shortcut development strategy" in the industrial sector in order to make best use of raw materials, specifically the "resources" that are wasted without processing.

Mongolians have a saying that "everything except the breath of livestock can be used". Depending on how and when it is taken, their livestock provides many resources. When alive, the wool, cashmere, hair, milk, and manure are all viable and utilised; after slaughter, all the raw materials can be used, from the meat and hides to everything else including horns, hooves, tails, internal organs, rumen and bladders. It is a very extensive and comprehensive list and

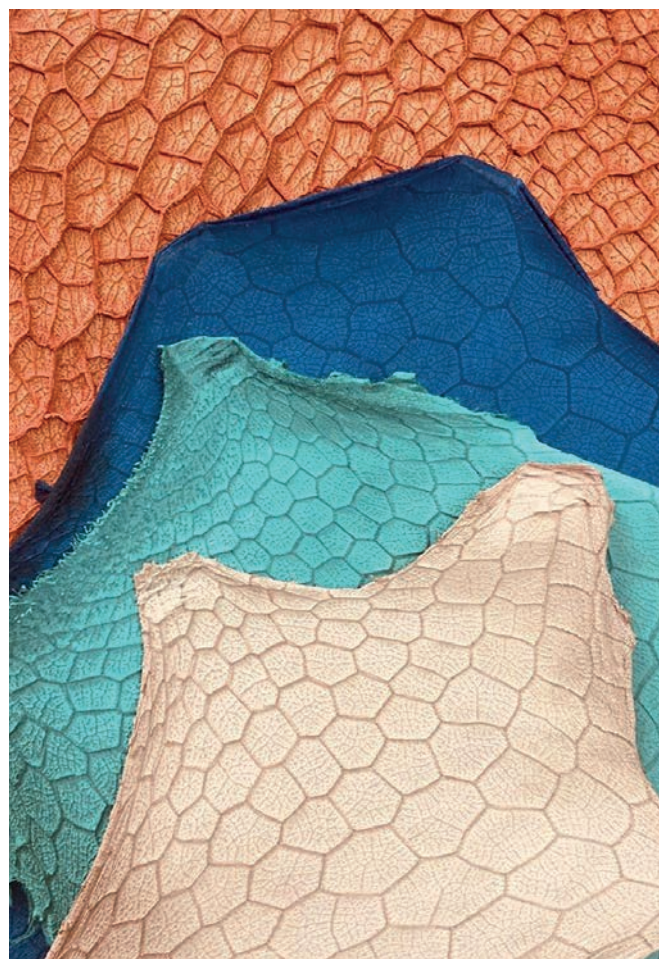
could possibly qualify as zero waste.

From our research, four areas of further interest were investigated.

1. To invent tendon sutures for surgical purposes and develop an ecologically clean organic product;
2. To produce Rumen leather from rumen, using waste to produce new products;
3. To develop a technology to produce eco-bags and containers based on traditional bladder processing know-how;
4. To invent organic materials using diverse membranes.

1. The technology to produce surgical tendon sutures is:

- Practically proven, unique and precisely developed;
- Developed on the basis of theory and scientific thinking;
- Environmentally friendly;
- Possible to generate and further develop new products in the future;
- A comprehensive study of tendon structure, composition and properties has been completed;
- Technological optimisation and production methods are developed and patented;
- The first experimentation of expanding the use of tendon suture and used as a surgical suture was conducted with successful results on animals;
- A natural raw material highly suitable for surgical purposes with higher tensile strength by reason it purely consists of collagen proteins;
- Tendon suture tensile strength was determined in comparison to diverse types of coarse and thin threads made of tendon, paper, hemp, cotton and fibre. The study shows that the strength of tendon suture is:
 - No lower than the strength of the same type fibre suture
 - 11.5 times stronger than cotton thread
 - 10.8 times stronger than wool thread
 - 2.4 times stronger than paper thread
 - 1.8 times stronger than hemp thread.
- These results were determined as a result of the experimentation on a laboratory suture tensiometer at the Research and Development Institute of Light Industry (RDILI).
- Surgical tendon suture experimentation was conducted on dogs⁵, and incisions and sewing were made in dog's skin, aponeurosis, muscles, and intestinal wall, and the healing status and tissue compatibility were studied after a week.
- The incompatibility of surgical suture would result in poor regeneration and a counterreaction of surgical suture, leading to increased properties of inflammation and antibodies. With the absence of such counter-reactions, we concluded that the tendon suture is compatible.
- The identification of the compatibility of tendon surgical suture proves the possibility of producing surgical suture from tendons, and opens further opportunities to continue the experiments to advance the technology.
- Conducting further research on substituting imported surgical suture, to produce it in Mongolia and for export will further practical research results and economic benefit.



Rumen leather, made from the cows stomach, has a unique hexagonal honeycomb surface effect. In this example the surface has been flattened through an ironing process.

CREDIT: DR T. TURMUNKH

2. Production of a new material, Rumen leather, from waste material

- Production technology is science-based, environmentally friendly and has eco-technological benefits;
- Possibilities to develop the production of brand new types of innovative materials with distinct properties;
- Experimental production of souvenirs and small leathergoods based on the material properties of rumen leather materials was a real innovative solution;
- It is quite feasible to establish this sector of manufacturing;
- A new technology for processing bovine rumen and omasum was developed and patented (#2429);
- A novel leather-type material named "Rumen Leather" with a hairy and patterned surface and thin corium was developed and its chemical and physical-mechanical characteristics were certified according to MNS5393: 2004 standard;
- This natural material is non-slippery, displays distinctive pattern and hairy surface that has a positive haptic effect. Small items and souvenirs made of this natural material are available in a wide range of colours.

Table 1: Chemical, physical-mechanical properties and comparison of Rumen leather

No.	Parameters	Leather for small items MNS 486:2000	Rumen leather MNS 5393:2004
1	Moisture, %	14	13.8
2	Fat, %	5-10	8.5
3	Tensile strength, N/mm ²	12	7
4	Elongation, %	15-25	18-30
5	Tear strength, N/mm /not less than /	20	45

Table 2: Chemical, physical-mechanical properties and comparison of Rumen leather

No.	Parameter	Unit	Sheepskin	Goatskin	Bovine		Ovine	
					Stomach	Rumen	Stomach	Rumen
1	Weight	kg	3.4 ± 0.04	2.6 ± 0.02	1.68	0.52	0.58	0.36
2	Size	dm ²	86.5 ± 0.54	73.4 ± 0.26	67.3	6.8	12.0	2.6
3	Thickness	mm	1.97 ± 0.02	1.87 ± 0.02	0.61	0.55	0.28	0.42
4	Tensile strength	N/mm ²	10.2 ± 0.44	16.2 ± 0.62	3.68	4.79	2.98	3.63
5	Elongation	%	81.8 ± 3.52	81.35 ± 1.77	97.5	121.0	65.2	92.6
6	Shrinkage (Shrinkage t)	°C	65.1	65.7	60.0	58.1	55	50.1

3. A method of manufacturing new products based on traditional bladder processing technology

- Bovine bladder tissues consist of mucosal, muscular, superficial serous, and adventitious membranes. The mucosal surface has rows of transitional epithelium cells. The inner lining of mucosa membrane has capillaries under the urothelium. The muscular layer consists of internal and external detrusor and sphincter muscles, which are surrounded by connective tissue.
- Staining the connective tissues in Masson's trichrome (a three colour staining procedure) revealed a large amount of connective tissue lumps around the muscular layers, starting from the lower part of the mucosal epithelium⁶.
- The results of this study demonstrate that it can be used as an organic bag of diverse sizes depending on its stretch and shrinkage properties. The traditional technology in this area is being studied and developed further.

4. The possibility of creating new materials using diaphragm and pericardial sac, livestock-origin raw materials

- Histological researches on the structures of bovine and ovine diaphragms and pericardial sacs.
- The diaphragm tissues consist of mesothelial layer, a core membrane, and striated layer collagen fibres. The mesothelium has single squamous polygonal epithelium cells. The core layer employs elastic fibres, while the striated layer has bundles of collagen fibres. Staining the connective tissues in Masson's trichrome revealed the most layered parts of the organ consisted of nodules of elastic and collagen fibres⁶.
- The pericardial sac displayed a very rich structure with single squamous epithelium cells, a layer of mesothelium on the inside, connective tissues in the middle, and elastic fibres covered with serous coating on the outside. Staining the connective tissues in Masson's trichrome revealed the

most layer parts of the organ consisted of nodules of elastic and collagen fibres⁶.

- It is reasonable to assume that the similarities in indications, including the presence of layers and collagen fibre nodules, display characteristics of a new material. The results of this study achieved a high-quality suede material from the experiment of processing technology.
- Technological solutions for processing bovine diaphragm and pericardial sac have been developed and can be summarised as follows:

Brief information on technological procedure:

The rumen, omasum and abomasum are processed through the basic technology of leather processing, while certain procedures were amended in the processes of fat removal, degreasing and softening due to the characteristics and features of the raw materials.

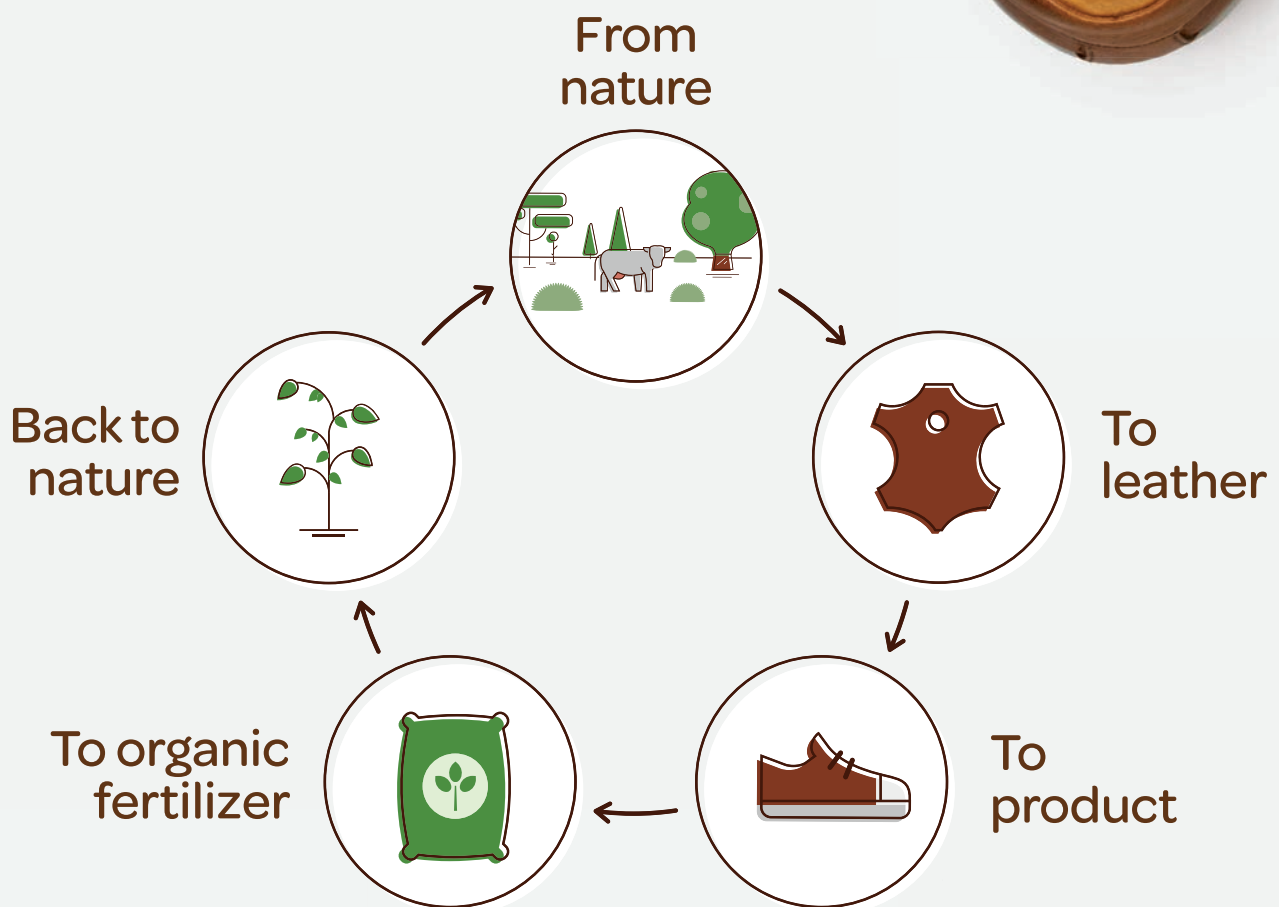
The rumen, omasum, and abomasum are internal organs which are naturally fatty, multi-layered and membranous. It was therefore necessary to take into consideration the procedures of these processes. 🌐

References:

- Tugs S., "On development issues of Technological management" dissertation, 2000
- Tugs S., "Technology and equipment to produce a new material from processing livestock-origin by-products" A scientific technological project, RDILI, 2005
- Tsenduren S., "Technology to process livestock- and animal-origin raw materials and product", 2000
- Tsetseg-Ulzii Sh., "Traditional technology to process bovine bladder", 2020
- Tugs S., Erdene N., "Opportunity to utilise the tendon suture for surgical purposes", "Surgery" journal, 2004, #7
- Nyamdolgor U., Soyolmaa G., Baatarjargal P., Altanchimeg A., "Results of Histological research", Veterinarian Institute, 2019.



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Leather and the circular economy



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Leather products are eminently repairable



Leather is in keeping with sustainable consumption and sustainable production and, thus, supports the UN's Sustainable Development Goals (SDGs)



Use of leather aids the battle against marine pollution, also part of the SDGs



The leather industry opens up pathways into the circular economy for companies of all sizes, including many thousands of small and medium enterprises



Leather content fulfils finished product manufacturers' desire to use recycled material



Finished products made from leather will meet criteria for green tax relief and for green procurement exercises



Leather manufacturing supports green employment commitments

Credit: WTP/Flaticon

Lived experience of LCA

Lifecycle assessment (LCA) data is in high demand. This is a world in which brands and consumers are reluctant to take suppliers' word for anything. After a greenwash goldrush that has gone on for years, no one can blame them. Facts and figures and documented evidence are the name of the game now and LCA has won recognition as the best methodology to use to dig up these gems. Even so, the doyen of LCA in the leather industry, Federico Brugnoli, is determined, in the face of a surge in demand for his expertise, to frame companies' efforts in a down-to-earth context.

The world's resources are scarce and there is resistance to sharing them more evenly. "This is one of the main reasons why an evolution from a linear to a circular model is needed," he says. "This is good for the leather sector, which is one of the oldest examples of circularity." He puts this forward as the reason why LCA matters today and why leather manufacturers and finished product manufacturers and brands that use leather need to embrace it.

He calculates that 163 of the companies listed in Fortune 500 have already made a public commitment towards achieving not just lower carbon emissions, but carbon neutrality. These companies come from 23 different countries. Mr Brugnoli makes the point that large companies expressing a commitment to carbon neutrality will necessarily have a major effect on the whole supply chain; if they commit themselves to carbon neutrality, they commit their suppliers

Lifecycle assessment is such a hot topic that we are devoting the entire Thought Leadership section in this issue of World Leather to it. Here, in the first of three articles, we consider the experience of LCA that companies in the leather value chain have had so far.

too; either that or their suppliers cease to be their suppliers. "This is why we have to talk about LCA," he continues, "not because it is a fun discipline, but because it provides data that will help us find a path towards improvement."

Numbers game

A warning, though. Everyone is looking for a number, Federico Brugnoli says, but the number is not the end of the work in hand here, just the start of it. There is more to say about this in the articles that follow in this section, but anyone who has heard Mr Brugnoli speak about LCA in the



Federico Brugnoli, arguably the leather industry's foremost authority on LCA.

Credit: Micam

last decade or so will know that this has been his consistent message: this discipline is complex and it is a mistake to try to reduce everything it tells us to a single number, say for carbon emissions expressed as CO₂-equivalent per square-metre of material. The founder of specialist, Milan-based consultancy Spin 360 and long-time collaborator with Italy's national tanning industry body UNIC and with the wider leather sector has never wavered from this message.

The good news is that, in his long experience, practices that lower carbon footprint in the tannery will also deliver production efficiencies and cost savings. LCA exercises consistently flag up for leather manufacturers ways in which they can achieve the same quality while consuming fewer chemicals, less energy and less water. Greenhouse gas protocol divides emissions into three different categories or 'scopes', with Scope 1 referring to direct emissions from a company's own facilities, Scope 2 to the indirect emissions from company's use of electricity, and Scope 3 covering indirect emissions from the wider supply chain. Mr Brugnoli argues that investing in LCA will show companies how to buy better. In other words, they will be able to see at a glance which suppliers can offer them materials and products that will help lower Scope 3 emissions. He offers this example: "There are chemical producers who are now working on carbon-neutral chemistry. This can have an effect on the environmental impact of leather and on the impact of any finished products made from that leather." More on this later, too.

Future-proofing the business

The experience of LCA of Tuscany-based leather producer Nuti Ivo is, so far, that it has been instrumental in helping the company develop a strategy for making its production, which generates 1.5 million square-metres of finished leather per year, more sustainable. The company's head of sustainability and business development, Rebecca Nuti, says she is convinced that making the operation as sustainable as possible and being able to demonstrate this achievement to customers is a way of securing the future of your business. "This is because sustainability has become our customers' core value," she explains.

In this case, the Nuti Ivo Group has decided to aim for carbon neutrality as its sustainability objective. Ms Nuti explains that she views this "long journey" as having three distinct steps. The first is to measure accurately the company's greenhouse gas emissions and set a target for bringing them down. The second is to put in place measures that will lower the company's environmental impact. And the third is to set up an offsetting programme to compensate for those emissions that remain. Federico Brugnoli says offsetting is a valid tool to use when you can no longer achieve a reduction in your own emissions.

"We are still between step one and step two," Ms Nuti explains, "but before the end of 2023, we will see our impact come down and we will start to compensate for our residual emissions." The group's LCA will cover 17 product families,



The Nuti Ivo group's LCA will cover 17 product families, seven types of raw materials, seven hide suppliers, more than 100 processes and more than 100 different chemical products.

Credit: Nuti Ivo Group

A photograph of elephants in a savanna during a heavy rainstorm. The elephants are covered in water droplets, and the air is filled with rain. The central elephant is facing the camera, while others are visible in the background.

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Stahl's Mike Costello, speaking at the Sustainable Leather Forum in Paris in September 2022. Credit: Sustainable Leather Forum

seven types of raw materials, seven hide suppliers, more than 100 processes and more than 100 different chemical products that are in use at the Nuti Ivo tannery. "It's a lot of information," she says, "but the important thing is that the more specific information you collect, the more the result will reflect the actual emissions of your company."

Maximum yield

Waste reduction is a large part of the benefit that Brazil-based group JBS Couros has taken from its work on LCA so far. Its sustainability manager, Kim Araújo Camões De Sena, explains that different parts of a hide have different fibre structures, resulting in different types of leather with different values. There are materials that are in high demand and materials that are not; JBS Couros has used LCA to work out which parts of a hide cannot yield profitable leather and removing them from the process before investing time, energy, water and chemicals in tanning them.

Mr De Sena realises, of course, that there are companies that are putting tanning waste to reasonable use, making composite materials for example, but it still amounts to what he refers to as downcycling. Instead, JBS has begun cutting off material from the belly and neck areas as soon as the hides it uses

have been limed. "This material is not leather; it is still hide," he says. "But it has collagen and is of value, for example to the food or pharmaceutical industry. We are creating less waste, while reducing our environmental impact and maximising yield."



JBS Couros says LCA has helped it save resources by identifying which parts of the hide it need not tan. Credit: JBS Couros

Recipe review

Another major Italian tanning company, Rino Mastrotto Group, agrees that it is important to collect specific information. Alberto Gallina, who joined the group in 2022 to manage environmental and social governance, says that using data from LCA to calculate an average for the wide range of leather articles the Arzignano-based group produces was a proposition it turned down early in the process. "We discarded that option immediately," he says. "Our preference was to be able to compare data from different articles, from different sites, from leather produced using different technologies, and also to look at the differences from technician to technician, because the human factor is also very important." The group has found important differences, with some of its tanneries showing an advantage in finishing, and others scoring better in the beamhouse. This has prompted further analysis of the potential benefits that could accrue from changing some recipes.

Chemical reaction

Rino Mastrotto Group says its experience of LCA so far shows that the biggest impact in its tanneries comes from the chemicals it uses. It is important, therefore, for suppliers of

leather chemicals to engage in LCA exercises of their own. Producer of tannins from tara, quebracho and chestnut Silvateam is one chemicals company that has made a start on LCA. Board member Michele Battaglia says there are errors “inside the numbers” that have come to light so far, but he says Silvateam respects the early results and regards the figures as “the best we have at the moment”.

He adds that it is important for his company and for others across the leather value chain to stick with it. “After a few years of this, everyone is going to have a good number,” he says, “because we are doing a good job. Five or ten years from now, we will have really good numbers. It’s a process: we receive the data, we see where we stand and then we have to improve. By 2026, our hope is to be carbon-neutral, or at least for many of our products to be carbon-neutral.”

Another leather chemicals group, Stahl, worked hard and invested heavily to complete LCA studies for 150 strategic products in its portfolio by the end of 2022. The group’s environmental, social and corporate governance director, Mike Costello, says he now expects the total to be 300 product LCAs completed by the end of 2023. “The data we have is available for customers to see on request,” Mr Costello says, “and we intend to use it to help populate public databases with real, primary data in the next year or two.”

He says Stahl is “still really careful” about making comparisons between products. This is the reason he gives: “We are still in the early days of data collection. Yes we have the tools and we have two people in the company working full time on this, just on collecting data in all of our factories, so we are on the right path, but it’s still early.”

Mr Costello explains that, from the years of work Stahl has put in on LCA so far, one clear conclusion it has drawn is that by far the greatest impact on the carbon footprint of its leather chemicals products is the carbon footprint of the raw materials. In fact, its calculation of its own greenhouse gas footprint is that 90% is in upstream raw materials. “This doesn’t mean that our processes are not important too,” he continues. “We focus on those, and we have made gains there, but the real focus now is on Scope 3, indirect emissions, which for us is on the extraction and the processing of the raw materials.” He says that, as a general rule, the more sophisticated the chemical product, the higher its carbon footprint will be, but as a caveat he points out that these products are likely to be used more sparingly in a recipe for a particular leather article. The use of higher volumes of more basic products in the beamhouse and retanning make more of a contribution towards most tanners’ overall global warming potential, he points out.

Another observation he makes on the environmental footprint of leather is that, like everyone in the industry, he thinks that there should be zero allocation for what happens to the raw material before it leaves the abattoir. He is confident this will happen. But when it does, it means the contribution of chemicals and of the raw materials for those chemicals to the overall carbon footprint of leather will be even greater. For this reason, he thinks there should be wide interest across the industry in the work Stahl and others are trying to do. “Chemicals could, potentially, have the largest impact for a tannery in the future,” he says. 🌱



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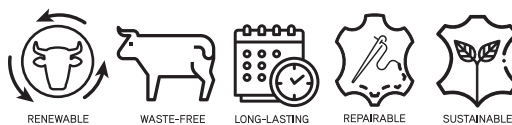
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Bridge of Weir Leather is using the results of its LCA to win customers around to leather.
Credit: Scottish Leather Group



Doubts remain about LCA



All industries have become intent on measuring their impact on the environment in an effort to present themselves as sound, sustainable sectors. LCA (lifecycle assessment, or lifecycle analysis) is now a widely adopted methodology for capturing data to show how big an impact different materials and finished products have. Leather manufacturers and finished product brands that consume leather are among those that have embraced LCA and some of the valuable information that these exercises have generated has already come into the public domain. Elsewhere in this issue of *World Leather*, we document, for example, the contribution that Scottish Leather Group's LCA data has made in convincing an automotive brand, the previously reluctant Polestar, to invest in leather for its car interiors.

Nevertheless, there are some who remain unconvinced that the benefits of LCA are worth all the hard work and investment companies have to put in.

LCA is popular, but it has its critics too. Influential voices say it makes complex situations seem too simple and encourages comparisons that are based on information that is not meaningful enough.

All about the context

In the past, we have quoted the work in this area of the director of the Geneva Center for Business and Human Rights, Professor Dorothee Baumann-Pauly, and London-based sustainability consultant and former World Bank economist Veronica Bates-Kassatly. In one of their 2022 joint papers, 'The Rise of Life Cycle Analysis (LCAs) and the Fall of



Sustainability - Illustrations from the Apparel and Leather Sector', they say one of the drawbacks of LCA is that it focuses on environmental impacts without considering social impacts. In much more detail, they lay out their objections to the "highly context-specific" nature of LCA outcomes, pointing out that attempts to draw general conclusions from context-specific data "can result in serious inaccuracies". And where the context of leather is concerned, the two authors insist that durability should be part of any meaningful comparison. Material A's LCA might suggest it has a lower carbon footprint than material B's, but if material B lasts five times longer, B should be the material of choice.

The quality of LCA output, like most other outputs, is wholly dependent on the quality of the data that goes into the exercise. A clear example of a serious inaccuracy deriving from poor-quality data is the leather industry's recent run-ins with nonprofit organisation the Sustainable Apparel Coalition over the LCA-based score it has applied to leather in its Higg Materials Sustainability Index (MSI). In 2020, the global leather industry formally asked for the suspension of the MSI's leather score, saying it depended on "out-of-date, unrepresentative, inaccurate and incomplete data" to present leather in an implausibly poor light compared to a whole range of fossil-based synthetic materials.

Not just numbers

On this, the authors of the 'Rise of LCA' paper agree: out-of-date, unrepresentative data, "collected without adequate scientific understanding", will produce inaccurate impact measurements. Data is not just numbers, they insist, but numbers "that capture, with a fair degree of accuracy, the reality that they purport to reflect". Gathering data is a science in its own right, from the questions you ask, to how you collect and analyse the responses. They add, in forthright terms: "The larger the sample size and the more independent the data collection is from those undertaking the study, those funding it and those involved in generating the product concerned, the more likely it is that the data will be representative. Many of the LCAs currently used in the leather sector use outdated values, small sample sizes, producers who are not remotely



There are worries that, in the real world, buyers just want a single-number result from LCA studies to allow them to make quick decisions about which material they should choose. Credit: Première Vision Leather

indicative of global production and data that was not independently collected. The result is data GIGO: garbage in, garbage out."

Distinctions between the details that are important and those that are less so are not always obvious to the untrained eye. In many cases, even otherwise

experienced LCA experts will lack the in-depth knowledge needed to carry out truly valid assessments of niche industries such as leather. Companies often balk at the cost of hiring genuine specialists to carry out this work and take a do-it-yourself approach, "with predictably poor outcomes".



Investing in LCAs for individual articles requires a lot of work and investment from leather manufacturers.

Credit: Gruppo Mastrotto

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It is not just about the volume of water you use, but about the context in which you use it.
Credit: UNIC

Consequential versus attributional

There is another objection. Attributional LCAs, which measure average impact, are being “universally promoted as a means to inform consumers of the environmental footprint of their fibre and fabric choices” the authors say. They add that proposed European Union Product Environmental Footprint (PEF) legislation is a case in point and the secretary of the International Council of Tanners, Dr Kerry Senior, has said their assessment is “absolutely correct”. When this point came up in discussions at the end of 2021, Dr Senior said that all of the sustainability metrics and labels that were informing the European Commission’s work on this had “the same limitations”. He expressed concern that this was helping providers of petroleum-based plastics present themselves as sustainable alternatives to leather.

But according to Ms Bates-Kassatly and Professor Baumann-Pauly, when it comes to making an informed choice between alternative materials, it is necessary to use consequential LCAs. These, unlike their attributional counterparts, measure specific rather than average impacts; they take into account what specific companies do in making specific products within specific boundaries. “To our

knowledge, there are no consequential LCAs of generic global fibres,” they say. “Instead, current evaluations rely solely on attributional LCAs.”

Another benefit to the leather industry of consequential LCAs is that they are a key component of system expansion. This is the concept that industry bodies, including Italy’s UNIC and the European Union’s COTANCE, have referred to for years as a basis for arguing that the hide’s allocation of the upstream carbon footprint of a cow should be zero.

Investment required

By definition, though, carrying out specific, consequential LCAs for individual companies and, beyond that, for their individual products is a complex and expensive task. Elsewhere in this section, we quote the environmental, social and corporate governance director of Stahl, Mike Costello, as saying the chemical manufacturer aims to have completed LCAs for 300 of the products in its range by the end of 2023. His team now includes two people who devote themselves full time to this work. We have spoken to one prominent leader in the global leather manufacturing sector who has tried to take his group down the consequential LCA road but says he will not continue. “If we have to do this for each article, it will cost too much and take too long,” he says.

“Buyers don’t want to spend time poring over detailed reports that explain in full the results of an LCA.”

One way round this will be for enough LCAs to take place, with the companies carrying them out finding ways to share the relevant data. Then tanners using similar types of raw material, the same machinery, the same chemicals and comparable amounts of energy and volumes of water to produce their leather collections will be able to offer their own LCA results more quickly and more cheaply without having to start from scratch for each article. But this will take time, and while the industry waits, the easy, context-ignoring, average-focused attributional LCAs compiled with old and inaccurate data are likely to remain popular.

Golf score

Brands and campaign groups will quote figures from these studies to justify their material choices. Meaningful data may be more than “just numbers”, as the authors of the ‘Rise of LCA’ insist, but the numbers are readily available, easy to share and seem, on the surface, simple to understand. Another figure in the industry, this time a senior representative of one of the largest and most innovative leather chemicals developers, has told *World Leather* that he sees no end to the use of these figures to draw quick conclusions about which materials are the most sustainable.

“Buyers don’t want to spend time poring over detailed reports that explain in full the results of an LCA,” he says. “It’s much easier for them just to use their smartphones, scan QR codes on samples or swatches at an exhibition and compare the numbers that come up for the different materials they are interested in. It works like the result of a golf tournament: this one has a score of five; this other one has a score of eight, so the one with the lower score wins. This is what is happening in the real world and I’m not sure what we can do now to make it stop.” 🌐

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Establishing ways to communicate effectively about what is a complex, science-based subject is one of the areas in which there is still plenty of work to do.

Credit: OekoTex



What lies ahead for LCA and leather?



Ideas and tools that can help leather manufacturers lower their environmental impact have been at the core of industry innovation for years and is still one of the main claims of any new equipment that comes to market. Technology providers are also working hard to make tanning machinery more connected to management information systems. This will make it easier to measure impact and to see quickly if amendments to recipes can make a real difference. And all of this should make it easier for tanners to engage in LCA exercises.

These things take time, though, and time may not be on the leather industry's side when it comes to using LCA widely to its advantage. Elsewhere in this section, we quote Michele Battaglia of Silvateam, who estimates that it may take a further five years or more to have "a really good number" to use to show the environmental footprint of different leather articles. Five years, at least, of painstaking work and expensive investment lie ahead, then.

Again, as we have said in the other articles in the Thought Leadership section this time, this comes at a time when, in the real market, companies are taking a single number and

The leather sector's engagement with LCA is likely to bear fruit if the industry can work out ways to use this science-based system to make it clear to customers that they stand to gain from using leather. Achieving this clarity, however, requires more work.

using it to make decisions today. They are not going to wait five years and there is a danger that the "really good number" may come too late for some brands and some tanners. There are buyers who have already made the decision, based on imperfect data from lacklustre LCAs to move away from leather.



Data quality

A genuine expert on how LCA can work well for the leather industry, Federico Brugnoli, says the discussion on the quality of some of the measurements that are on the market has been a long one. In what he calls “a proper, certified LCA”, one key parameter that needs to be taken into account is “the so-called data quality”. Secondary data detracts from the usefulness and value of any LCA, he continues, and he and his colleagues at the consultancy he runs, Spin 360, remain loud advocates of primary data.

He points out that leather is not the only industry to raise serious concerns about the widely used comparison tools in resources such as the Higg Material Sustainability Index. Figures from the Higg suggest that silk, for example, is 250 times more impactful than polyester. “It’s clear that there is a need for some evolution there,” Mr Brugnoli says diplomatically. There is a wide range of information that needs measuring for leather producers’ LCAs, he admits, and some of them are difficult to understand. “We are talking about something that is difficult, science-based and needs to be understood in the tannery and by people across the supply chain,” he says. “This means the need for the necessary skills and competences is huge because companies are taking buying decisions based on this, based on LCA. There is a threat and a risk. But at the same time, some companies that have threatened to move away from leather are moving back thanks to LCA. There are players in the leather industry who are doing really well on LCA and reaping the benefits.”

Play the advantage

Scottish Leather Group’s Dr Warren Bowden remains convinced “LCA is the only reliable, third-party metric we can use”. And he says the reason it has helped the group secure customers such as automotive group Polestar is that its own detailed, specific LCA allows it to show that the impact of the products it makes is “about half of what people think it is” because the current information buyers are using to make comparisons is based on global averages, the fruit of attributional LCAs. There are clear advantages that a leather manufacturer in Scotland can point to in a more context-specific consequential LCA. Water is abundant there and cattle hides of good quality are readily available and completely traceable. To be even



more specific, the energy recycling plant that Scottish Leather Group has had in place for more than a decade, turning material that it cannot make into leather into a source of heat instead, is also paying dividends in its LCA results.

Senior figures from other parts of the global leather industry have expressed a high level of admiration for what Dr Bowden and his colleagues have achieved. One, who has no direct connection to Scottish Leather Group, talks of a recent encounter with the Shanghai-based director of a major automotive group’s design studio. This person, who has a prominent role in choosing materials for car interiors, repeated in a public forum the tired lie that leather manufacturers kill animals. Our industry contact wonders how someone in such a responsible role can be so ill informed and says it is, perhaps, an indication of how far anti-leather campaigns have reached. He says: “A major accessories group has told me it will be out of leather by 2025 and the reason is LCA. LCA is the only game in town for the generation that is taking over the buying decisions and leather is in danger of losing at that game, unless it’s leather from Scottish Leather Group.”

Means to an end

It is not just about the information you can gather from LCA, Federico Brugnoli says. Work on traceability, for example, may show that one farm a tanner sources hides from performs

For better and for worse, LCA can influence buying decisions on leather.

Credit: Lineapelle

much better than another farm. “From this, what we need to do is to establish links between good products and good farming practices,” he explains. “Traceability, then, like everything else that comes under scrutiny in LCA, needs to be, not an end in itself, but the means to a good outcome.”

For him, this shows, once again, the benefit of consequential LCA compared to attributional LCA. “In attributional LCA, anything that has value shares the impact. But consequential LCA is a kind of ‘what-if’ scenario,” he explains. “What if there were no leather industry? What would we do with raw hides? Major organisations, including the United Nations Food and Agriculture Organisation, are considering this as part of their work on LCA. Governments and big decision makers are using it as a point of reference. My personal opinion is that it seems clear from this that the leather industry should receive contributions from the meat industry because we are upcycling one of their by-products.”

He insists this is part of the story that the leather industry will be able to tell as a result of all the hard work already done and will be done on LCA 🌱



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Gentle persuasion



This has happened more than once: a company makes public pronouncements about leaving leather behind it and draws opprobrium from people inside the industry's active and loud but limited bubble. If it later changes its mind, perhaps after realising that the financial benefits of bringing leather products to market outweigh the extra complications involved in sourcing and using the material, the bubble's reaction can include schadenfreude and even a tiny bit of triumphalism.

We are only human and these reactions are the result of provocation and frustration at an animus against leather that feeds on falsehoods. Nevertheless, the recent situation involving automotive company Polestar and its attitude to leather proves that there is a better way.

The strictest standards

Polestar's name has been around since the 1990s, but it was only in 2017 that owners Volvo and Chinese group Geely Motors decided to launch it formally as a standalone brand devoted to electric vehicles. Its first car, the now discontinued Polestar 1, went into production in 2019, with the Polestar 2 following in 2020. It generated a high level of publicity by emphasising that it was using "vegan WeaveTech upholstery" in the interior of these vehicles instead of leather. The Polestar 2 even won 'Best of the Best' in product design in the 2021 edition of the prestigious Red Dot Awards. Head of design, Maximilian Missoni, said Polestar was determined to challenge

Specialist electric vehicle developer Polestar is sticking with leather in its latest model, the Polestar 3, wearing the circular-economy credentials of the material as a badge of honour.

all the "old notions of what premium means in the car industry" and it was clear in the early days that he viewed a preference for plastic in the seat covers as part of that.

As *World Leather* reported in April-May 2022, the automotive company then had a change of heart and said it would begin offering customers leather upholstery as an option in the Polestar 2. And when it launched the Polestar 3 in October, it kept the leather option in place. Head of sustainability, Fredrika Klarén, says the company has put leather into the mix because it has found upholstery leather that meets its sustainability credentials. She explains: "We require that all leather used in Polestar products must live up to the strictest standards on animal welfare, along with being fully traceable and chrome-free." Bridge of Weir, part of Scottish Leather Group (SLG), is the supplier that convinced the company to come into the pro-leather camp. It is now wearing its love of leather with pride.

Specialist electric vehicle developer Polestar launched its latest model in October 2022.

CREDIT: Polestar





Polestar's head of sustainability, Fredrika Klarén.



Nappa leather from Bridge of Weir remains an upholstery option in the Polestar 3.
CREDITS: Polestar

Kindred spirits

At the start of 2023, the Gothenburg-based electric vehicle manufacturer announced its decision to apply clear labelling on the seats of the Polestar 3, highlighting the sustainability credentials of the leather it is using. It said it regards these labels as “a badge of honour”. In its announcement it explained that it was proud to present the nappa leather it has sourced from Bridge of Weir as 100% traceable, chrome-free, and animal welfare-secured. The rawhides are sourced from responsible suppliers in the UK and Ireland. Bridge of Weir’s lifecycle assessment (LCA), with independently verified data, shows that the material has a carbon footprint of 8.1 kilos of CO₂-equivalent per square-metre, the lowest published figure for leather anywhere in the world so far. Polestar said this labelling initiative will show consumers that its commitment to transparency is serious.

It knows Bridge of Weir’s commitment to transparency is equally serious and refers to the leather manufacturer as “a kindred spirit”. It has shared with all its stakeholders extensive comments from SLG’s head of innovation and sustainability, Dr Warren Bowden, explaining the leather manufacturing group’s approach.

Beautiful, sustainable leather

The LCA information that Polestar is including in its new labels is independently created and verified, Dr Bowden says, ensuring what he calls “100% confidence in the figures presented”. The group has in place what he describes as “a patented circular manufacturing process that helps minimise waste and radically reduces carbon footprint without any carbon offsetting”. Integral to this is an on-site thermal energy plant that Bridge of Weir formally unveiled in 2010. Here, Dr Bowden calculates, more than 50% of each rawhide

in weight is reclaimed as energy and converted into steam, generating heat for the leather production process. He talks of borrowing the water Bridge of Weir uses; it treats, recycles and reuses as much as it can and further treats water it cannot reuse before sending it back into the eco-system. Most of the water that enters the production system comes from an on-site loch, which SLG owns. The LCA study concluded from all of this that Bridge of Weir’s water consumption is zero.

Since 2017, the leather manufacturer has been using certified 100% renewable electricity. “This also dramatically reduced the carbon intensity per hide of our leather,” Dr Bowden explains. He goes on to say that SLG has command of 100% traceability of the raw hides it sources from its suppliers in the UK and Ireland. Furthermore, he points out that these are “two of the highest-rated territories globally in the Animal Protection Index”. This index is compiled by a non-profit organisation called World Animal Protection and covers 50 countries, with governments, chief veterinary officers and the World Organisation for Animal Health verifying the data. The tannery is also audited by multi-stakeholder body the Leather Working Group and has a rating of 100% for traceability from it.

Dr Bowden says: “These credentials are important as they reassure our customers of the provenance and sustainability of our raw materials. All our own suppliers sign a code of conduct enabling full traceability of our supply chain. We are committed to producing a quality leather product for our customers and our local procurement policy ensures quality raw materials. High standards of animal welfare are important to us as they ensure high-quality raw materials. At the end of the cattle’s life, we take the discarded hides and make them into beautiful, sustainable leather.”



The automotive company is committed to creating a carbon-neutral car by 2030.

CREDIT: Polestar



Independently verified data from a lifecycle assessment study shows that the Bridge of Weir's leather has a carbon footprint of 8.1 kilos of CO₂-equivalent per square-metre, the lowest any company in the global leather industry has reported so far.

CREDIT: SLG

Ethically superior

His message to Polestar is that, with the rise of electric vehicles and fossil fuel-free transportation, it should be clear to everyone that leather, "a truly biobased circular material, made using second-generation biomaterials, is ethically superior". Then he points out that leather outperforms the alternatives technically in terms of durability, comfort and aesthetic appeal. He says leather is "re-emerging as the material of choice in the premium electric vehicle sector".

The automotive company's response is that it has "a moonshot goal" (in other words, a lofty ambition) to make a climate-neutral car by 2030 and it likes the fact that SLG has made clear its ambition to create carbon-neutral leather by 2025. Warren Bowden explains that this ambition extends to making SLG a carbon-neutral company by 2030. Then, every square-metre of leather the group produces will be carbon-neutral and will have the LCA data to prove it. "We have achieved more than 90% progress towards net-zero," he says, "without offsetting. We have a clear roadmap to complete our journey, including our own self-generated renewable energy plant with solar panels to supplement our existing energy recovery plant and green-energy generation."

It seems clear to him that Bridge of Weir and Polestar are "on the same page". He describes the car company as "a progressive, challenger brand", with a clear commitment towards sustainability. "Bridge of Weir has the same commitment and passion," he says. "We too strive to lead the way in our own sector with the responsible, sustainable manufacture of leather and we believe that we can work with Polestar to help it achieve its climate-neutral ambitions."

Instead of recoiling in horror when messages that were unsupportive of leather came out of Polestar in the early days, SLG has worked quietly behind the scenes to use facts,

figures, science and documented proof to show the automotive company what the benefits of using leather are. It has listened to Polestar and taken on board the company's commitment to producing a climate-neutral car. It then set about showing its customer that using leather can help make its dream come true. ☺



Strict animal welfare standards in the supply chain is one of the main arguments Bridge of Weir used to bring Polestar into the pro-leather camp.

CREDIT: SLG

A microscopic view of numerous blue, rod-shaped bacteria, likely E. coli, floating in a liquid medium. The bacteria are elongated with rounded ends and some show internal structure. The background is a soft-focus blue.

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The Teton Leather Company's Bora bag in dragonfin leather.

CREDITS: Teton Leather Company/Inversa

Regenerative leather turns heads



Fish-leather start-up Inversa Leathers made good ground in 2022. The Florida-based company launched in 2020 as a response from scuba-diving enthusiasts Aarav Chavda and Roland Salatino to damage that an invasive species of fish was causing to aquatic environments. The first fish they focused on was the lionfish (*Pterois*), which is native to the Pacific and Indian oceans and is part of the food chain there, but more recently found its way into the Atlantic and Mediterranean, where it has fewer natural predators. According to the Inversa founders, a single invasive lionfish can eat 70,000 native fish in reef ecosystems. Normally, these thousands of native fish would feed on algae growing on the reefs but, in their absence, reefs are becoming overgrown and, in some cases, dying off.

Inversa has made it clear that it does not argue for the elimination of lionfish from their native environments, but it is determined to make a contribution towards removing them from places where they are invasive. Removing the fish from places such as the Atlantic coast of the US and the Gulf of Mexico costs money; Inversa has worked out that using the skins of the lionfish to make leather can help fund this conservation activity. So much so that the company uses the word 'regenerative' to describe the activity of removing the fish. It also describes the materials that Inversa is able to offer finished product manufacturers as

A leather producer that aims "to go beyond sustainability" ended 2022 on a high at a special event in London.

regenerative leather because its work is helping to protect biodiversity and to build back the ecosystems that the invasive lionfish have damaged.

Leather-making technique

Removing the fish allows damaged coral reef ecosystems to regenerate themselves. "In this way, we are moving beyond sustainability," co-founder Aarav Chavda has said. An important part of this is that coral reefs in the western Atlantic support the livelihoods of more than 40 million people, according to the company's calculations.

It found a US-based partner tannery, which it has not named, and worked with it to formulate its own technique for turning the fish-skins into leather and launched the company. It has also said little about the tanning process but has said it is preparing to move from chrome to a tanning system based on the mineral zeolite.

Raw material diversity

Achievements in 2022 included being named as one of the finalists in the Global Ocean Resilience Innovation Challenge (ORIC), which was led by non-profit group the Ocean Risk and Resilience Action Alliance. Later, Aarav Chavda and Roland Salatino won inclusion in the Forbes '30 Under 30' list in manufacturing and industry, and the start-up secured new funding of \$500,000 from sustainability-focused venture capital firm Conservation International Ventures. There were customer successes with Italian sneaker brand P448, which used colourful lionfish leather on the heel-tabs of one of its new styles, and Manhattan-based accessories brand Oleada, which used the leather in a new laptop sleeve design.

Also in the course of last year, Inversa began using two new types of raw material. In each case it chose material that is completely in keeping with its quest to protect eco-systems from invasive species. It is making leather from the estimated tens of thousands of invasive pythons that have descended upon and devastated the Everglades National Park in Florida.

The park supports a wide range of economic activities with a combined value of \$1.3 billion per year, Inversa has said, adding that this is under threat because the pythons are "feasting on endangered species" that are native to the environment. It is also making leather from the skins of invasive dragonfin (Polypterus) fish. These invasive fish escaped from ponds into the Mississippi River during flooding and are wreaking havoc among more than 150 native species.

London calling

Towards the end of 2022, an Idaho-based accessories brand, Teton Leather Company, showcased a dragonfin leather collection. It comprised dragonfin versions of its Bora handbag, along with a clutch bag and a bifold wallet.

In something of a breakthrough for the Teton Leather Company and for Inversa, this collection went on display at a special event in London just before Christmas. Lone Design Club, a London-based initiative, aims to bring independent, ethical fashion brands to "conscious shoppers" at events and in temporary pop-ups. For the Christmas shopping season just gone, it created a

pop-up store at one of London's most famous fashion addresses, Jermyn Street, and used it for an event it called 'Season of Wonder', which it described as a showcase for an array of products from independent and sustainability-conscious brands.

For designer and founder of the Teton Leather Company, Francesca Ritchie, the 'Season of Wonder' experience meant international acknowledgement of the work her company and Inversa have been able to do together. "We have broken through so many barriers to turn invasive dragonfin into a tangible piece of good for the earth," she says, "something that our clients can be proud to own. Restoring the planet is a shared responsibility and it's really a privilege to trailblaze these efforts with partners like Inversa and Lone Design Club at such an incredible location." 🌱

Dragonfin arrived in the US to make people's fish-ponds more exotic. But after flooding, they made their way into the Mississippi River and now pose a threat to 150 native species of fish. Inversa specialises in creating leather from invasive species of fish and reptiles.





Spoor's traceability capability helps a responsibly made German luxury brand forge ever-closer links with the land.

A natural connection



A personal recommendation made by the “awe-inspiring” owner of her chosen tannery, located in the North Rhine-Westphalia region, led German-born fashion designer Tina Lutz Morris straight to Spoor, a Danish supplier of animal-to-finished-product traceable leathers, that was established in September 2020. “I love her so much”, Ms Lutz Morris says of the trusted tanner, whose name she prefers not to reveal, but for whom she is full of praise and does identify as having been a key player in the development of compostable leather for London-based accessories label Anya Hindmarch’s recent Return to Nature collection. (The rawhides were, incidentally, sourced and semi-processed by Spoor’s owner Scan-Hide.)

After learning what Spoor’s laser-enabled, processing-proof traceability technology could do for her made-in-Germany luxury leathergoods line, Ms Lutz Morris was moved to take “another step up” in the realm of responsible production. It was not long before reassessing her leather supply became a “no-brainer”, the designer explains. Since conversations between the two began last March, Lutz Morris, whose showroom is based in Berlin, has placed each subsequent raw material order with Spoor*. The brand officially initiated the process to transition 100% of its hides to those purchased exclusively from the latter in September, which its founder-designer estimates should take about a year to accomplish in full.

The first fruits to result from their collaboration debuted towards the end of 2022, taking the form of three classic Lutz Morris handbag styles in pebbled calfskin: the Blaine pouch, the Parker book bag and its horizontal counterpart, the Parker Horizon, which comes with either a long or short strap. In typical fashion, all have been assembled by hand by local artisans in North Rhine-Westphalia, and are being sold in a caramel-toned hue called Saddle.

Mutual respect

The word “spoor”, of Germanic origin, can mean the imprint left behind by a wild animal, such as its tracks or scent, as it moves through the world. Fittingly, each piece from Spoor comes from Scan-Hide, founded in 1991, Denmark’s last-remaining tannery, and bears a laser-printed mark of its own. All of its semi-finished leather meets Leather Working Group



Designed by Tina Lutz Morris, the collection's Blaine bag features a custom-made frame and hardware made in Italian and German workshops well-known to the brand, in line with its commitment to sourcing locally. CREDIT: Lutz Morris



Spoor's laser printing technology enables data-backed visibility of the animal that supplied each hide's life story, based on its individual ear tag ID. CREDIT: Spoor

(LWG) gold standard and is Oeko-Tex-certified. All hides are uniquely numbered to correspond with the same, officially registered, identification digits as those borne by the individual cow or calf's ear tag and stored on the tannery's database. This chain of data maintains the connection between an animal, its life story and its hide on leaving the abattoir, helping fashion and lifestyle brands tie their material purchasing decisions to real, documented evidence pertaining to core sustainability metrics such as animal welfare and climate impact. Scan-Hide exclusively sources from Danish, Swedish, German, Finnish and Dutch suppliers and sells its wet blue and wet white directly to finishing tanneries.

A new term, coined by a student intern and shared with *World Leather* by Spoor's business development director, Birgitte Holgaard Langer, captures what sets Spoor apart most concisely: "digitainable integrity". Many organisations, she says, now know that they must be able to back up claims and storytelling with data, to prove that "what they say is also what they do, and what they do is also what they say". Traceability facilitates transparency, she adds, which can help brands avoid accusations of greenwashing. Last year's announcement that companies operating in the European Union will be required to begin compiling annual sustainability reports which give a detailed view both of their social and environmental footprints by 2024, at the latest, has not had a major impact on business at Spoor just yet, according to Ms Holgaard Langer, but the team has definitely observed an increased interest in its technology. "Our focus is and will continue to be on what traceability enables and why data is so essential for our industry," she underlines.

Ms Lutz Morris, meanwhile, considers it a personal duty to run her brand as responsibly as possible, from the promises she herself makes through to the company's management of resources, whether that may be opting to purchase more artisanal components from local, family-run workshops or minimising head office waste. The designer has thus far absorbed the extra expense of buying fully traceable leather herself, she tells us, and would simply feel uncomfortable doing things any other way. She laments the current levels of greenwashing in the fashion industry at large and emphasises how her own team is "constantly trying to improve every single step". Vouching for this, Ms Holgaard Langer praises her customer's strong vision, commitment to finding better ways of working and, of course, for being "extremely picky" with her

materials. Prior to meeting in person at Lineapelle, along with representatives from the finishing tannery, the partners had enjoyed "some really good conversations" online, which fostered a sense of trust and sped up the co-creation process considerably, the director elaborates.

Conscious pursuit

Especially in keeping with Lutz Morris' closely connected supply ecosystem, which does not extend beyond Europe, Ms Holgaard Langer estimates that around half of Scan-Hide's leathers hail from German farms. Also helpful, particularly in view of present macroeconomic challenges, is the fact that the finishing tannery is certified gold by the LWG, has its own water purification system, and had installed a solar power plant on site pre-covid. "It is incredible what [the owner] is doing there," the designer reaffirms. She ascribes her preference for leather to its quality and durability, but does not rule out integrating other petroleum-free materials further down the line, but only if the material can tick the necessary boxes. She is already consulting with two US-based firms about this. Plastic-based "vegan" substitutes have long been ruled out, though.

Precision, it would seem, is key. Ms Holgaard Langer shares a similar eye for detail in her appreciation for definitions and points to the challenges Spoor initially faced from industry stakeholders who already thought their leather "traceable" by virtue of knowing the finishing tannery or the name of the abattoir which initially supplied the hides. "We are part of a big ecosystem," she stresses, "we can't close our eyes and just say we are a by-product." 🌱

** Herning's HEART contemporary art museum will host Spoor's first-ever event, Spoor Xperience, in celebration of Scandinavian furniture design and its roots in the area's biodiversity on February 8.*



Designer Tina Lutz Morris trained in Paris at ESMOD. After 24 years in New York, she now lives in Milan, but maintains close connections with her native Germany and its artisanal traditions. Her brand, Lutz Morris, won the 2020 Sustainability Award from the Fashion Group International in New York.

CREDIT: Daniela Müller-Brunke

Estée Lauder's purchase of the Tom Ford label at the end of 2022 included handing over men's and women's fashions to Ermenegildo Zegna — but few details are known about what the Italian luxury brand has in mind for the US designer's vast collections.

Tom Ford: More questions than answers

The words 'Tom Ford' typically evoke images of celebrities on red carpets donning the brand's sleek, classic but slightly edgy look, or little signature padlocks affixed to leather bags and high heels, or even the man himself wearing his own label's simple black suit nearly every day as if it were a uniform.

Estée Lauder, whether you are speaking of the luxury company founded in 1946 or its elegant late founder, is synonymous with fragrance, makeup and skincare products. The group's brands include beauty powerhouses such as Aveda, Clinique and Jo Malone London.

Understandably, when Estée Lauder announced in November it was paying \$2.8 billion to become the sole owner of the Tom Ford brand and all of its intellectual property, the pairing struck many as surprising.

However, Tom Ford also has a successful luxury beauty business, introduced in partnership with none other than Estée Lauder in 2006, which makes that part of the deal a very natural fit. Among its offerings are esteemed fragrances, some of the most expensive lipsticks in the world, and a range of other beauty products for men and women. Tom Ford Beauty has had double-digit net sales growth for the last ten years, and Estée Lauder expects the business to achieve annual net sales of \$1 billion next year. The purchaser said the acquisition will help to "propel our momentum in the promising category of luxury beauty for the long-term, while reaffirming our commitment to being the leading pure player in global prestige beauty."

But what of Tom Ford's other highly successful categories? The extensive offerings of womenswear and menswear, the £3,000 leather handbags, the £1,500 laminated snakeskin wedges, the alligator-strap watches?



Tom Ford walks the runway during New York Fashion Week.

CREDIT: SHUTTERSTOCK.COM / OVIDIU HRUBARU



Tom Ford's leather accessories are often colourful and edgy.

CREDIT: TOM FORD

For now, what's known is that deal will expand Tom Ford's longstanding relationship with Ermenegildo Zegna, the Italian fashion brand famed for its luxury menswear and accessories; this will include a long-term licence for all men's and women's fashion as well as accessories and underwear. (Another Italian group, Marcolin, will take over Tom Ford's eyewear collections.) The acquisition is expected to close in the first half of 2023; Tom Ford (the man) will stay on as the brand's "creative visionary" until the end of the year and Domenico De Sole, chairman of Tom Ford International, will serve as a consultant until then as well.

Zegna has said it will acquire the fashion business operations "necessary to perform its obligations as licensee"; it will work with Estée Lauder on the creative direction and positioning of Tom Ford.

In some ways, this explanation by Zegna raises more questions than it answers, when one considers what the Tom Ford brand entails.

Who is Tom Ford?

That Tom Ford would end up a billionaire and household name is perhaps the inevitable conclusion of a dynamic, storied career. Born in Texas and raised in New Mexico, as a teen he moved to New York to study architecture and then fashion; there, he had his first jobs in the industry, met his future husband, and was soon welcomed into the brand that would change his trajectory forever: Gucci.

Mr Ford started as Gucci womenswear designer in 1990, having moved to Milan for the role; in 1992 he became design director and in 1994 he was named creative director.

This was a pivotal moment for Gucci, too. The brand was facing financial difficulties, and, as Mr Ford described years later in an interview with CNBC, most of the designers had left and shareholders were trying to figure out how to extract their money.

"I had a window of opportunity to just do what I thought was right for fashion at that moment," he explained. "I related it to the brand, but it was really what I felt customers wanted. It was in my contract at the time that I was not to appear on the runway or talk to the press, but I took a risk. I thought, 'this collection I feel very strongly about; I'm stepping onto that runaway'."

The risk paid off. The runway show earned the label 'Milan's biggest fashion' and the Council of Fashion Designers of America (CFDA) bestowed that year's international award upon Mr Ford and Gucci.

"Gucci in 1995; every fashion-smart woman in the world was saying it, wearing it, wanting it," said actress Jennifer Jason Leigh as she presented the award. "By marrying American verve with Italian craftsmanship, Tom forged an international style that put the Gucci label back at the forefront of chic."



A leather women's suit by Tom Ford.

CREDIT: TOM FORD



At Gucci, Mr Ford was in charge of just about everything; the design of all product lines, the group's corporate image, and even store design. His duties expanded to cover Yves Saint Laurent and YSL Beauté when Gucci acquired them in 2000. Eventually he was creative director of the whole group until he resigned in 2004. During his ten years there, sales increased from \$230 million to almost \$3 billion; his talent and instincts had become legendary.

His next step was to launch an eponymous brand. In 2005, he and former Gucci exec Domenico De Sole announced the creation of Tom Ford. (That year he also opened a film production company, Fade to Black, and directed, produced and co-wrote his first feature film 'A Single Man'. Some industry insiders predict Hollywood is where Mr Ford's interests now lie, but we will leave that for the film magazines to cover.)

The new brand started with menswear; in 2007, it announced that Ermenegildo Zegna was to produce and distribute luxury men's ready-to-wear and made-to-measure clothing, footwear and accessories under the Tom Ford label. In 2011, Mr Ford debuted his first line of womenswear and, within the year, then First Lady Michelle Obama was wearing one of his dresses when she dined with the late Queen Elizabeth II of the United Kingdom.

Today there are more than 100 freestanding Tom Ford stores around the world, including locations in Milan, Tokyo, Las Vegas, Dubai, Zurich, New Delhi, and Shanghai. In 2016, Mr Ford told the *Financial Times* that he wanted his beauty, eyewear and fashion company to be a \$3 billion business by 2025. This purchase by Estée Lauder was a little early and a little under, but he has come awfully close.

What will Zegna do with Tom Ford?

Having worked with Mr Ford since that initial partnership in 2007, Ermenegildo Zegna has operations in place for some of the brand's clothing, footwear and accessories for men. But the collections are more numerous and often more playful than Zegna's; its men's footwear includes colourful sneakers, zebra-

Zegna's footwear is relatively conservative in style.

CREDIT: ERMENEGILDO ZEGNA

striped slippers, and metallic leather boots, whereas Zegna's sneakers, for example, come in more staid colourways such as a black or navy deerskin.

More significantly, the Tom Ford brand also carries womenswear, shoes, and accessories, items that, currently, Ermenegildo Zegna does not offer. When asked by *World Leather* about what changes Zegna will put in place to fulfil the requirements of the Estée Lauder deal, a spokesperson offered no comment beyond what was initially announced in November, and the company has not issued any additional hints as to its plans since then.

However, Zegna is not completely new to the world of women's fashion. In 2018, the Italian luxury group bought an 85% stake in Thom Browne, in a deal valuing the US fashion house at about \$500 million. Founder and designer Thom Browne held on to the remaining 15% stake. Zegna said at the time that it hoped the acquisition would expand its business in the US and broaden its customer base. And it has. Thom Browne collections include clothing, footwear, bags and leathersgoods for men and women. According to Zegna's third quarter 2022 reports, Thom Browne revenues grew 29.8% year on year, reaching €69 million and, notably, it was womenswear that had the most impressive numbers. "Womenswear continues to grow faster than menswear, now accounting for almost 30% of the brand's revenues," the report said, highlighting that founder Thom Browne had been appointed the next chairman of the CFDA, which was "yet another sign of the brand's growing success and momentum".

So while Ermenegildo Zegna has offered little about its plans for taking control over one of the most celebrated names in fashion, its long-standing work with the Tom Ford label already and a solid track record with Thom Browne suggest the Estée Lauder deal could prove to be successful for all involved. It just remains to be seen what that success will look like. 🌐



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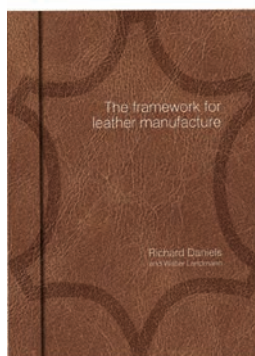
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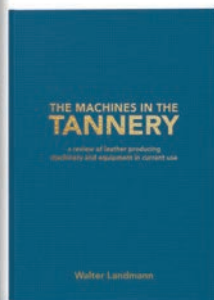
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