

Leather Learning Series

Part One – The Inherent Sustainability of Leather

Q&A Session of the Webinar

Speakers:

- Anne Gillespie, *Director of Impact Acceleration – Textile Exchange*
- Stephen Sothmann, *President – Leather & Hide Council of America*
- Kerry Senior, *Director – Leather UK*
- Egbert Dijkers, *Chair – Leather Naturally*

To access the recording and presentation: <https://responsibleleather.org/resources/archives/>

Q: Can we get some background data total revenue of leather / hide industry, production volume, waste amount?

The LHCA regularly provides this information for the USA on a weekly newsletter that all are welcome and invited to subscribe to. The questioner may find our annual report the most helpful, but the weekly newsletter may also shed additional light on all things hides and leather-related in the US. The annual report for 2019 is available on our website here: http://ushsla.org/sites/default/files/documents/US_hide_Situation_2020.pdf and the weekly newsletter and other information is available here: <http://www.ushsla.org/press>

Q: '@Anne: why the SSCI - hence yet another social standards? If it is for the value chain: by far most of textile companies that use leather are both members of the Higg as well as SLCP signatories. Both of these Social Modules are applicable to all steps in the textile value chain with exception of the farm level. So - SSCI only for the farm social aspects? Or else, why another standard than the one to which most brands have committed anyway?

We are using the SSCI for leather production only, as they have developed a robust benchmarking process that we can use to recognize existing standards. The SLCP focuses on sharing audit data, but we want to give recognition to standards: we are using this approach for the other scopes as well (eg: animal welfare). However, we are still working on the final approach, so would welcome the opportunity to look at how we can work with SLCP as well.

FYI, we do not yet have social welfare as a scope for the Leather Impact Accelerator

Q: Would transport and slaughter etc. count into GHG of agriculture or into the other categories?

The annual US EPA GHG data takes a direct emissions view for all activities associated with the industry in order to compare industries on an "apples to apples" basis. It follows the international standards developed by the UNFCCC for uniform GHG reporting guidelines and is the official report of the United States of America to the UN and other international bodies regarding US GHG emissions. The EPA's annual report is available here: <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2018>. According to table 1-7: IPCC Sector Descriptions, the agriculture activities included in the GHG numbers are "Emissions from agricultural activities except fuel combustion, which is addressed under Energy." It would include the following activity: fertilizers, pesticides, GHG from crops and animals, animal processing (slaughter), etc. Indirect emission from transportation and removal of emissions via carbon sinks such as grassland management and other plant activity is included in other sections including "Transportation" and "Land Use, Land-Use change, and Forestry Waste". Accordingly, the direct emissions of cattle production according to this report are 2% of total GHG emissions. When you include the indirect aspects of cattle and beef production to form a full LCA, US beef's carbon footprint is 3.3% of total US GHG emissions.

Q: Which accreditation is required to verify the use of byproduct of food production? Please mention certification body and accreditation certificate.

The U.S. Department of Agriculture is the regulatory body that governs food production in the US, specifically beef production. There is no certification for hides originate in food production, but at only 2% of the value of the animal, no one is producing cattle for hide or leather purposes only. the USDA's daily byproduct value report is available here: https://www.ams.usda.gov/mnreports/nw_ls441.txt. As of April 14 2020, the hide is valued at 1.36% of the total value of the animal.

"@Gentlemen from US

Does the agriculture % include the CO2 from imports / use of agriculture crops to feed the cattle? Or is _all_ US cattle 100% gras fed? If there are import, does the calculation include the CO2 of the imported crops that then are fed to the cattle? And if there are such imports, do they include the reduced CO2 absorption capacity of the area the crop may potential come from e.g. Amazon area?"

The US generally does not import cattle feed from other countries (with the exception of product moving between Canada and US), as it is largely self-sufficient in this area. The US is a net exporter of most cattle feed products such as corn (maize), soy, and other products.

Q: '@Kerry: as you criticize the 'recycled' versions of leather. Should the leather industry not rather support and help defining what 'circularity appropriate' leather is, rather than

to bash on them not being 'virgin' leather? Why should they not be called 'recycled leather' for example if they indeed are made on the basis of what used to be real (virgin) leather, e.g. scraps?

Hi, I didn't criticize the material, I was quite clear that the reuse of wastes should be supported. The point is that these materials are not leather as defined in the accepted definition. The leather industry has no issue with other materials, assuming they are properly described. The same applies to bonded leather fibres; these are not leather in the same way a beef burger isn't a steak.

Kerry

Q: Did this tanning LCA look at toxicity, or was toxicity an impact category that was considered?

The LCA is a commercial report and only those parts that are in the public domain can be presented. However, the US EPA considers Chromium III salts to have little or no toxicity and there is no reported toxicity for vegetable tans. Aldehydes used in wet-white tannages, such as glutaraldehyde, may be moderately toxic. However, in properly manufactured leather, none will present a hazard

Q: Can you please send a link to the LCA on different tanning types? Thank you!

The full report is available to Eurofins BLC Leather Technology Centre members only

Q: '@Gentlemen from US: Did the stats from EPA consider in their calculation that the majority of the US population is a) overfed in terms of carbohydrates and calories and b) lacking AS WE SPEAK many ingredients to healthy nutrition already because there is not enough affordable vegetables being produced?

The report from the USDA was a comprehensive look at nutritional needs of the population based on accepted dietary guidelines. Their executive summary states: "Compared with systems with animals, diets formulated for the US population in the plants-only systems had greater excess of dietary energy and resulted in a greater number of deficiencies in essential nutrients." Source link: <https://www.pnas.org/content/114/48/E10301>

Q: What is the source of the LCA related to the tannage choice slide?

The report was produced for Eurofins BLC Leather Technology Centre. They have shared the data summary that was shown but the full report is available only to their members

Q: How about Chromium? I understand that tanneries in Europe have stricter rules in terms of waste production and its disposal, what about other production countries?

Legislation on waste varies from country to country and to the degree that it is enforced. However, if there is a concern about how your suppliers are handling chromium-containing wastes, you could look for audit systems such as the Leather Working Group. Tanneries that are members of the LWG have to comply with common standards, that helps to smooth out the variation in national legislation and have to be audited, reducing scope for non-compliance. Note - there are very many excellent tanneries that are not covered by LWG so talking to your suppliers is also a good idea.

Q: Is there a public list of attendees to this webinar? thank you

There is not a public listing of attendees.

Q: '@Kerry to the point of salt (and others of those chemicals): "All things are poisons, for there is nothing without poisonous qualities. It is only the dose which makes a thing poison." Should there not be a more nuanced statement that takes into consideration the actual management practice of a tannery? Let's just think of the Indian tanners I have seen, or some Moroccan ones, or say some in Kenya ... ???

Yes, all compounds can be hazardous but if that view is taken without context, we would be unable to use any chemicals. That is why I was quite clear that all chemicals can be used badly. Equally, all can be used well. Look at any industry and you will find examples of things being done badly. However, they are rarely representative of the majority and this is certainly the case for the tanning industry. If we are to consider the poor tannery in Morocco, shouldn't we also consider the excellent ones in the UK, France, Italy, the USA, China, etc.? But this is never the case when agenda groups attack leather. As I said, my hope was that people would look beyond the sensationalism and consider what their suppliers are actually doing.

Q: Why some automobile manufacturers are adapting to vegan leather?

Because there is a market for it. It just economics. The auto sector has been the growth area for leather in recent years

Q: Thank you for sharing context about leathers footprint and a closer look behind the stats. For beginners, what are the first steps or questions to be asking to reduce the footprint of my leather assortment? How would I direct my procurement and production teams?

I would suggest you to check on the Leather Working Group website to see listings of tanneries that have been audited on (among others) water and energy consumption.

Q: How much chemistry including coatings are typically added to leather?

That is very difficult to say as this will depend on so many factors like animal origin, country of origin, type of leather, thickness, application type, etc..

Q: Can you speak to the deforestation issues associated with cattle and subsequently leather production?

Deforestation is entirely unacceptable. There are two points that need to be considered: most of the deforestation is illegal and; no one is rearing cattle for the hides. On the latter point, we have seen this year and in the second half of last year, hides being landfilled as they have no value. This has been an issue in Brazil, where deforestation is happening. However, prior to COVID-19, Brazilian meat exports were rising rapidly. Meat production may produce the hides that leather is made from but take leather away, and the cattle will still be reared. Leather is not a driver for deforestation.

Additional Comment: The National Wildlife Federal (NWF) has done a significant amount of work with the Brazilian industries to ensure the level of deforestation in the country is minimized. They have a significant number of resources on this topic which I suggest you look at. Their main message is that international companies should not completely turn their back on Brazil due to these issues, but rather work within the positive systems that have been developed to reward the good companies and marginalize the bad/illegal actors.

Q: Two questions please.

-Lots of hides are wasted into landfills. Economical cost was mentioned, but is there also an environmental impact associated to this practices as well?

-Based in the direct/indirect emission showed for livestock (5%~14%), how much if it should be attributed to hides/leather?

This is a critical point when discussing with leather users as there is a lot of misleading information on this topic."

On the first question, I do not know but obviously would be better if it was avoided. On the second, the industry position is that the allocation from livestock rearing to the hide should be zero. The EU PEFCR for leather manufacture has allocated 0.42% but we are hoping that this will be reduced to zero during the testing phase for the new rules

Additional Comment on the first question: yes, there is most certainly an environmental impact in depositing 5.5 million US hides worth of organic waste in the landfill, including methane emissions when the tissues breakdown, etc. Obviously, the industry would sorely hope to avoid this outcome at all costs.

Q: '@Stephen: See <https://www.japantimes.co.jp/news/2019/08/25/business/global-appetite-beef-soy-fuels-amazon-fires/#.XpXU9aZS9hE> "Brazil exported a record 83.3 million tons of the crop in 2018, up 22.2 percent from 2017, according to the economy ministry. The country is the top supplier of soybeans to the United States but sends the most overall to China."

Thank you. Soy is used in a large variety of applications, such as soybean (cooking) oil, ethanol, etc. I do not believe the US cattle industry is using imported soy for cattle feed purposes. Follow up answer: This is a great report about the international trade in soybeans:

<https://www.ers.usda.gov/webdocs/publications/93390/ocs-19f-01.pdf?v=4048.3>. The US is a strong competitor with Brazil on the world stage for these products. US soybean imports from Brazil are minimal. In 2018/2019, the US was not a top importer of soy, which was lead by China and the EU (<https://www.statista.com/statistics/612422/soybeans-import-volume-worldwide-by-country/>). That being said, I reference my previous answer regarding the work of the NWF in Brazil to minimize deforestation problems, assuming this is the primary concern behind this line of questioning.

Q: Thank you for the insightful presentation. I learned a lot about leather. No doubt leather is an important part of our economy and a durable material that can last over time and I myself appreciate leather goods as a consumer. I understand Stephen's and Kerry's point that the GHG contribution % in the USA is small and there are some exaggerated claims out there. It must be frustrating. At the same time, the leather industry, through their operations and supply chain, has an impact on forestry, climate and water use. Even if a small part of the emission in the US, per IPCC we need unprecedented change across all sectors. How do you see your roles in reducing deforestation and reduction of greenhouse gas? I also recognize that it is indeed a challenging issue and it would be helpful to understand the challenges to setting up timebound commitments and making progress against these goals.

The issues you describe are largely issues for the meat and dairy sector. The large part of resource consumption and emissions happen in the livestock rearing phase, before the leather industry receives the hide or skin. As such, the leather industry has little or no influence on practices during the livestock phase. Animals are not reared for their hides or skins; this has become very clear in the recent past, as meat exports rise but the value of hides falls away to the point that an estimated 20% (before COVID-19) will be thrown away in 2020. On climate change, it is worth noting that the latest research from the IPCC has shown that, assuming current livestock numbers don't increase, there will be no net addition to GHG from livestock rearing. Steve discussed this in his presentation

Stephen: The point we are trying to make with regard to the popular focus on animal agriculture and GHG emissions is that it should not be treated in the same manner as extractive industry emissions, such as oil, gas, transportation, etc. GHG emissions in agriculture are minimal compared to these other sectors, and they also exist in a loop along with land use and management. The other industries we identified have no circular carbon sink element to them, their emissions all go one way and are the actual "problems" associated with climate change. The focus on "meatless Monday" and the like in an effort to mitigate climate change is misguided. We should be focusing far more efforts on "car-less Monday" or "airplane-less October" if we are going to have any significant impact on this problem. All of this popular media focus on only (at most) 3.3% of GHG emissions is extremely misguided.

Q: My understanding is that finished leather cannot currently be composted for a fully circular material loop. Can any of the speakers share if they know of organizations who are working to understand the compostability of leather products or design compostability into the front end of the hide finishing treatments?

You could check BLC/Eurofins in Northampton UK.

There is a lot of evidence that leather will rapidly disintegrate in composting conditions and the protein component will then biodegrade. Unfortunately, much of this work is not in the public domain

Q: "Some comments from researchers at Harvard and Oxford in response to the research linked above:

<https://www.pnas.org/content/115/8/E1704>

<https://www.pnas.org/content/115/8/E1701>"

As a peer-reviewed article by a major and well respected scientific entity (USDA), there will of course be robust criticism and dialogue regarding its methods and conclusions as is always the case. However, the existence of criticism does not preclude its findings or conclusions necessarily.

Q: '@Leather naturally gentlemen: I remember a leather from Scottish leather that was infused with petro-chemical polymers so as to make it light. It IS allowed to be sold as leather, AND is used in cars and airplanes. So THAT is leather? That leather is in essence synthetics ... as no way pure collagen? What is your take on that? Thank you!

I cannot comment on the leather as you describe it. Leather is of natural origin and the internationally recognized definition as set down by the International Standard Organization (ISO) is...Hide or Skin with its original fibrous structure more or less intact, tanned to be imputrescible, where the hair or wool may or may not have been removed. Leather is more finished to protect it from soiling like in airplanes. Textile airplane seats lasts three years, to five at very best depending on type. The seats need to be dry cleaned every six months so normally airlines buy 50% extra so the disruption is minimal. After cleaning they need re-fireproofing. If something like tea or coffee is spilt over textile the seat needs to be taken out of service until dried and/or cleaned and a polythene wrapper is normally put over it - aggravating and unsightly for the cheap airlines whose schedules and loading require 100% seat availability. Leather is made with 8 years in mind but usually lasts longer. We know that BA short haul planes recently kept the leather 12 years. They looked a bit worn at the end, but still perfectly serviceable. In this time no dry cleaning, or other treatment is required. Just an occasional wipe with a damp cloth, and it is good to occasionally Hoover out any biscuit crumbs. At end of life airline seats give useful sizes and shapes of leather for social enterprises to take them to make leather goods of various sizes.

Q: '@Stephen - Can you point me in the direction to learn more about vegetable tanned leather? It was my understanding that the BOD is lower with vegetable tanned leather, no?

The BOD in an effluent will be dependent on a number of factors, including the chemicals used, the process efficiency and any pre-discharge treatment. It's not possible to generalize on one tanning chemistry over another.

Q: '@Kerry: going on from your answer then it is totally OK to use the generic term 'recycled leather' for all of those types of products/materials that are using virgin-originated waste leather? Can you be more clear in terms of that specific terminology?"

The specific terminology is available in the BS, EN and ISO standards. However, recycled leather would not be acceptable. These materials would almost certainly be leather fibre board, recycled leather fibre or bonded leather fibre. Where leather has been reused, for example car upholstery being repurposed for leather goods, the material would still have the original fibre structure and could be described as leather but this would be reuse not recycling.

Q: Does anybody know what percentage of leather is tanned according to the standards of the LWG?

Approximately 20% of world production of finished leather

Q: Is that means vegan leather is cost effective than leather?

Vegan leather does not exist. Leather has a link with the skin of an animal. The only thing that a claim 'vegan leather' says is that it is not of animal origin. In most cases it is (largely) plastic. Plastic in most cases is cheaper for a brand to use compared to leather. The advantage of leather is that it will (in most cases) last longer, can be easily repaired and tends to look nicer during usage. Sustainability starts with using by-products instead of virgin materials (oil in the case of plastics). The second step in sustainability is 'longevity' extending the life time of usage, for which leather is the right material.

Q: Great presentation. Thanks to you all!